

Tasmanian Breast
Cancer Care
Resource for Health
Workers

Tasmanian Breast Cancer Care Resource for Health Workers

Prepared

by

Suzanne Crowley

for the

Strengthening Supportive Care for Rural Women with Breast Cancer
Project funded by the Department of Health and Ageing

Acknowledgements

This publication gratefully acknowledges material provided by the following organisations:

[Better Health](#) a Victorian Government initiative

[BreastScreen Australia](#)

[Cancer Victoria](#)

[Healthinsite](#)—An Australian Government initiative funded by the Department of Health and Ageing (DoHA)

[myDr website](#)

[National Health and Medical Research Council \(NHMRC\)](#)

[The Breast Cancer Institute NSW \(BCI NSW\)](#)

[The Breast Cancer Network Australia \(BCNA\)](#)

[The Cancer Council Australia](#)

[The Cancer Council Tasmania \(TCCT\)](#)

[The Tasmanian Cancer Registry](#)

[The Department of Health and Social Services Tasmania](#)

[The Menzies Research Institute, University of Tasmania](#)

[The National Breast Cancer Centre \(NBCC\)](#)

www.breastcancer.org—US site

www.healingdaily.com—US site

[CancerhelpUK](#)—UK site

[Cancerbackup](#)—UK site

This publication was made possible by the contributions of many people including: the Tasmanian Specialist Breast: Nurses Karen Campbell, Janelle Larkin, Nola Polmear and Sue Schwabe; Joan Williams and Gerry Rockliff, Community Nurses and breast cancer survivors, Margaret Egan and Lesley Cooper of The Cancer Council Tasmania, Robert Brodribb, Karen Cuff, Clinical Nurse Educator, Denise Bowden, Project Manager State Wide Cancer Services, Katrina Hodge, BreastScreen Counsellor, Karen Forster Community Education Officer BreastScreen and BreastScreen Tasmania staff.

Foreword

The *Tasmanian Breast Cancer Care Resource for Health Workers* has been designed to meet the information needs of health workers in Tasmania. Tasmania is primarily a rural State with a population of less than half a million centred around a myriad of small towns and three regional centres.

The State has over 30 community health centres including district hospitals and multi-purpose sites. Because of the manner in which community health services have developed over time, access to relevant and up-to-date material on a range of health care issues relies on the demand of the local population, the interests of staff and the availability of resources.

The Tasmanian Breast Cancer Care Resource for Health Workers is the result of a project to provide State-wide consistent and current resources. It has been developed through consultation with individuals, representatives and organisations who have an interest in improving the care of rural women who have or who have had breast cancer.

In keeping with the current focus on psychosocial issues, the resource emphasises the management of the person's psychosocial well being.

Gail Raw

State Manager

BreastScreen Tasmania

How to use this Resource

This resource is designed for use in both hard copy and as a CD-ROM.

The resource is divided into sections. Each section relates to stages in the prevention, diagnosis and treatment of breast cancer. For example the sections detail current surgery options, resources available in Tasmania for women with breast cancer and resources designed specifically for general practitioners.

Using the Resource on a computer

The CD-ROM resource uses hyperlinks to link related sections within the resource (for example Surgical Complications and Lymphoedema), and to connect to resources available on the Internet.

All hyperlinks are written and underlined in blue. Provided the computer in which the CD-ROM is used is connected to the Internet, clicking on the links will take you directly to the Website where the resource / publication is located. To activate a hyperlink follow the instructions that appear on the screen.

In order to keep this resource current and up-to-date please send any suggestions to the:

Community Education and Quality Officer Breastscreen Tasmania

Cancer Screening and Control Service

Department of Health and Human Services

GPO Box 125, Hobart 7001 Tel: (03) 6216 4300

Fax: (03) 6216 4326

Contents

Overview	1
The Breast	2
Types of Breast Cancer	3
Clinical Practice Guidelines	4
Surgery Options	5
Nursing Care / Follow Up	6
Lymphoedema	7
Adjuvant Therapy	8
Psychosocial Care	9
Younger Women	10
Metastatic Disease	11
Palliative Care	12
Targeted Resources	13

Contents

Practical Resources	14
General Resources	15
Professional Development	16
Glossary	17
	18
	19
	20
	21

Section	Title	Page number
1	Overview	
	1.1 Key Statistics	12
	1.2 Tasmanian Statistics	13
	1.3 Risk Factors	17
	1.4 Prevention	20
	1.5 Screening	22
	1.6 Genetic Clinical Services	24
2	The Breast	
	2.1 Breast Anatomy	26
	2.2 Breast Changes	29
3	Types of Breast Cancer	
	3.1 Pre-Invasive	35
	<i>Ductal Carcinoma In Situ</i>	36
	<i>Lobular Carcinoma In Situ</i>	38
	3.2 Invasive	40
	<i>Early Breast Cancer</i>	40
	<i>Locally Advanced Breast Cancer</i>	42
	<i>Metastatic Breast Cancer</i>	43
	3.3 Others	45
	<i>Inflammatory</i>	45
	<i>Paget's Disease</i>	47
4	Clinical Practice Guidelines	
	4.1 Management of Early Breast Cancer	49
	4.2 Management of Advanced Breast Cancer	50
	4.3 The Psychosocial Care of Adults with Cancer	51
	4.4 Younger Women with Breast Cancer	52
	4.5 Publication Information	53
5	Surgery Options	
	5.1 Breast Conservation	56
	<i>Comparison of Breast Conserving Surgery with Mastectomy</i>	
	5.2 Sentinal Node Biopsy	60
	5.3 Mastectomy	62

Section	Title	Page number
	Surgery Options <i>cont'd</i>	
	5.4 Axillary Dissection	63
	5.5 Breast Reconstruction	65
	5.6 Surgical Complications	70
	Nursing Care / Follow Up	
6	6.1 The Role of the Specialist Breast Nurse	74
	6.2 Physiotherapy	75
	6.3 Physiotherapy Tasmania	76
	Lymphoedema	
7	7.1 The Lymphatic System	78
	7.2 Lymphoedema: Assessment, Prevention and Management	82
	7.3 Key Points	85
	Adjuvant Therapy	
8	8.1 Radiotherapy	88
	8.2 Chemotherapy	93
	8.3 Hormone Therapy	98
	8.4 Complementary Therapy	103
	8.5 Others: <i>Herceptin</i> <i>Bisphosphinates</i>	104
	8.6 Clinical Trials	105
9	Psychosocial Care	110
10	Younger Women	118
	Care of the Patient with Metastatic Disease	
11	11.1 Impact of Advanced Breast Cancer	121
	11.2 Physical Effects of Disease Progression	124
	11.3 Management of Symptoms	126
	11.4 Interventions to Improve Quality of Life	127
	11.5 Management of Pain	129

Section	Title	Page number
12	Palliative Care 12.1 Palliative Care 12.2 Tasmanian Palliative Care 12.3 End of Life Issues 12.4 Key Points	 134 136 141 142
13	Targeted Resources 13.1 Aboriginal / TSI 13.2 Culturally and Linguistically Diverse (CALD) 13.3 Lesbian 13.4 Rural and Remote 13.5 Men	 144 146 147 151 154
14	Practical Resources 14.1 Travel and Accommodation Assistance 14.2 Practical and Financial <i>Prostheses</i> <i>Wigs and Hats</i> 14.3 The Cancer Council of Tasmania (TCCT) 14.4 My Journey Kit 14.5 Local Information	 156 157 159 160 161 162 163
15	General Resources 15.1 Support Groups <i>The Cancer Council</i> <i>Breast Cancer Network Australia</i> <i>Local Support Groups</i> 15.2 Partners and Children 15.3 Resources	 164 164 166 168 169
16	Professional Development in Cancer Care for Health Workers 16.1 Multidisciplinary Care 16.2 Communication Skills 16.3 Specialist Breast Nurse Training 16.4 GP Resources	 172 173 175 176
17	Glossary	179

1. OVERVIEW

1.1 Key Statistics

1.2 Tasmanian Statistics

1.3 Risk Factors

1.4 Prevention

1.5 Screening

1.6 Genetic Clinical Services

Key Statistics

- Breast cancer is the most common cause of cancer-related death in women in Australia.
- Age is the biggest risk factor in developing the disease. Over 75 per cent of breast cancers occur in women 50 years and over. Less than 10% occur in women under 40.
- Nine out of ten women who get breast cancer DON'T have a family history of breast cancer.
- The lifetime risk of women developing breast cancer before age 75 years is one in eleven. The risk of a diagnosis by age 85 is one in eight.
- From 1993 onwards, there has been a steady decline in the age-standardised mortality rates for women in the target age group of 50-69 years. The mortality rate for these women in 1989 was 66.7 deaths per 100,000 women; in 2003 the corresponding figure was 54.1.
- In 2002-2003 1,618,306 women participated in BreastScreen Australia screening. Of these women, 1,118,429 (69%) were in the screening program target age group of 50 to 69 years.
- The Program's aim is to achieve a participation rate of 70% among women aged 50-69 years. At present, the Program is screening 56.1% of women in this age group.
- In 2003, 3,663 invasive cancers (any size, all screening rounds) were detected through BreastScreen Australia in women aged 40 and over.
- BreastScreen Australia operates in over 500 locations nationwide via fixed, relocatable and mobile screening units.

Breast Screen Australia

Acknowledgements:

[BreastScreen Australia Monitoring Report, 2002-2003 \(May 2006\)](#)
[Cancer in Australia 2001 \(Dec 2004\)](#)

Related Topics

- [1.2 Tasmanian Statistics](#)
- [1.3 Risk Factors](#)
- [1.4 Prevention](#)
- [1.5 Screening](#)
- [1.6 Genetic Clinical Services](#)

Tasmanian Statistics

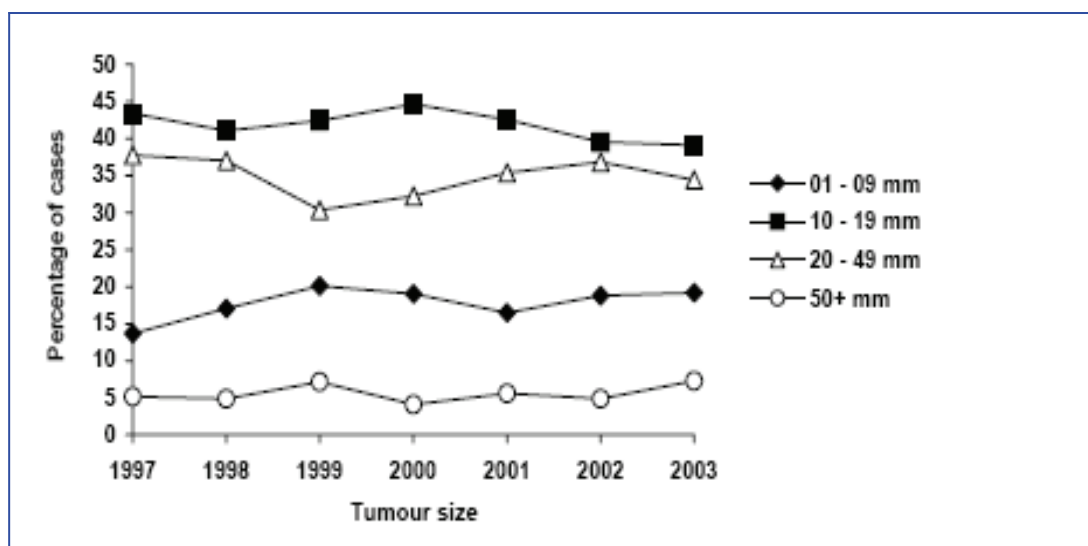
Female breast cancer 1997 - 2003

The Tasmanian Cancer Registry first recorded breast cancer tumour size and lymph node involvement in 1997 when funding was provided to all Australian cancer registries for this purpose.

Tumour size

In 2003, 95% of the 295 primary breast cancer cases (female) were histologically examined. Information about tumour size was available for 276 (94%) of these cases. Of these tumours, 53 (19.2%) were less than 10mm in diameter, 108 (39.1%) were between 10 and 19mm, 95 (34.4%) were between 20 and 49mm, and 20 (7.3%) were greater than 50mm in diameter. Figure 7 compares categories of tumour size from 1997 to 2003.

Figure 7: Breast cancer - Size of histologically confirmed tumours 1997 - 2003



Related Topics

[1.1 Key Statistics](#)

[1.3 Risk Factors](#)

[1.4 Prevention](#)

[1.5 Screening](#)

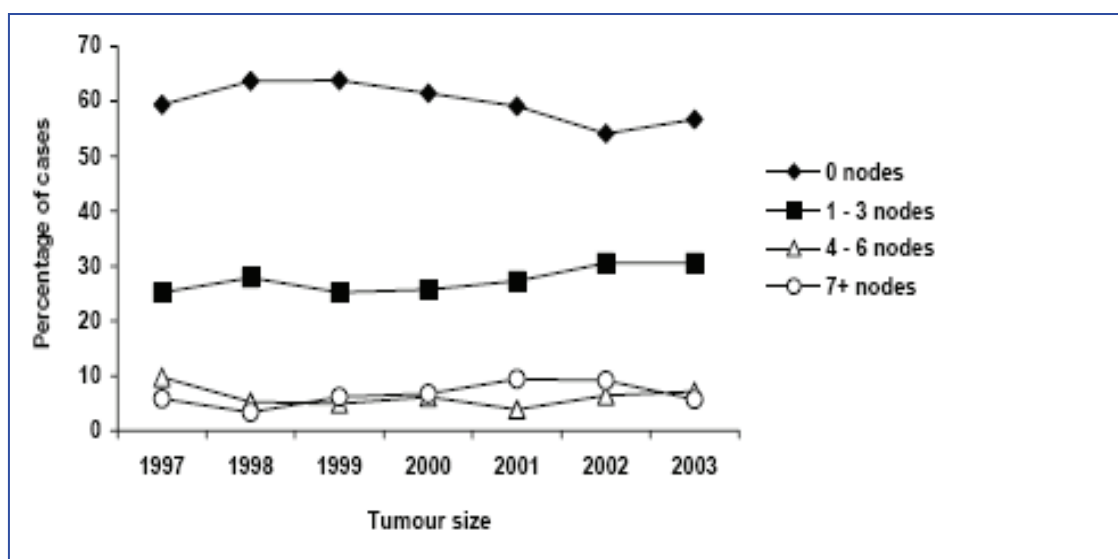
[1.6 Genetic Clinical Services](#)

Tasmanian Statistics *cont'd*

Lymph node involvement

Of the 295 primary breast cancer cases (female), lymph nodes were investigated in 210 (71%) of cases. Where nodal status was examined, 119 (56.7%) cases were classified as lymph node negative, 64 (30.5%) cases involved 1 to 3 lymph nodes, 15 (7.1%) cases involved 4 to 6 lymph nodes, and 12 (5.7%) cases involved 7 or more lymph nodes. Figure 8 compares categories of lymph node involvement from 1997 to 2003.

Figure 8: Breast cancer - Lymph node involvement 1997 – 2003



Related Topics

[1.1 Key Statistics](#)

[1.3 Risk Factors](#)

[1.4 Prevention](#)

[1.5 Screening](#)

[1.6 Genetic Clinical Services](#)

Tasmanian Statistics *cont'd*

Regional Distribution of Cancers

The regional distribution for each cancer site is shown as the number of cases and the percentage of all cases of each cancer site in each statistical division (Table 1). This information is based on recorded postcode of residence. On the basis of population numbers in each of the statistical divisions, the distribution of cancers would be expected to be 49% in the South, 28% in the North and 23% in the Mersey-Lyell division. Variation around that distribution can be expected due to chance occurrences and differences in the age distribution between the regional populations.

See diagram overleaf

Further information:

[Cancer In Tasmania](#)

[Tasmanian Cancer Registry](#)

[The Tasmanian picture](#) — The Cancer Council Tasmania

Related Topics

[1.1 Key Statistics](#)

[1.3 Risk Factors](#)

[1.4 Prevention](#)

[1.5 Screening](#)

[1.6 Genetic Clinical Services](#)

Tasmanian Statistics cont'd

Table 1: Regional distribution of cancer incidence for all sites with a minimum of 50 new cases 2003

T ICD-10	Site	Southern	Northern	Mersey-Lyall	Total
		234,903 (49%)	135,071 (26%)	107,120 (23%)	477,094 (100%)*
C 51	Prostate	205 (51%)	114 (28%)	85 (21%)	405
C 18-C21	Colorectal	155 (51%)	84 (27%)	67 (22%)	305
C 50	Breast	137 (46%)	89 (30%)	71 (24%)	297
C 33, C34	Lung	109 (45%)	73 (30%)	62 (25%)	244
C 43 Melanoma of skin		114 (52%)	61 (28%)	45 (20%)	220
C 81- C 85	All lymphomas	62 (58%)	25 (23%)	20 (19%)	107
C 54	Kidney	22 (48%)	19 (26%)	16 (24%)	68
CD1 – C14, C 30-C 32	Head and neck	28 (42%)	22 (33%)	17 (25%)	67
C 91 – C 95	All leukaemia	29 (45%)	20 (31%)	16 (25%)	65
C 67	Bladder	31 (48%)	23 (35%)	11 (17%)	65
C 25	Pancreas	31 (48%)	21 (32%)	13 (20%)	65
C 00	Lip	25 (49%)	14 (27%)	12 (24%)	51
	Total new cases		960 (49%)	565 (29%)	436 (22%) 1961

*Cancer types may not add up to 1005 due to rounding.

#Source: Australian Bureau of Statistics (ABS), Population Estimates by Age and Sex, Australia and States 2003, June 2004, Data Cube (Cat. No. 3235.0.55.001).

Related Topics

[1.1 Key Statistics](#)[1.3 Risk Factors](#)[1.4 Prevention](#)[1.5 Screening](#)[1.6 Genetic Clinical Services](#)

Risk Factors

There are various risk factors connected with breast cancer, the single greatest one being increasing age. The most important influence is the hormonal factor, including menstrual and childbirth history. The use of oral contraceptives at a young age and the extended use of hormone replacement therapy are known to increase breast cancer risk .

Breast cancer in close family members (first degree relatives) is an indicator of risk. Other factors associated with increased risk are a previous history of breast cancer or benign disease, an increased body size, especially a heavier body weight at older ages and exposure of breast tissue to ionizing radiation (particularly before 20 years of age).

Research is still continuing in many areas.

Below is a list of information relating to risk factors for breast cancer. These can be accessed via the Department of Health and Ageing's [Healthinsite](#):

Publications:

Title: Breast cancer: can you prevent it?

Publisher: myDr

Description: In the battle against breast cancer, it helps to know your breasts. They are made up of fat, nipple, milk glands (alveoli) and ducts through which milk can pass from the glands to the nipples.

Date: Jun 2006

Title: Breast cancer: early diagnosis is the key

Publisher: myDr

Description: The good news is that with advances in treatment and diagnosis, more women are surviving breast cancer than ever before.

Date: Jun 2006

Related Topics

[1.1 Key Statistics](#)

[1.2 Tasmanian Statistics](#)

[1.4 Prevention](#)

[1.5 Screening](#)

[1.6 Genetic Clinical Services](#)

Risk Factors

Title: Breast x-ray screening
Publisher: Better Health Channel
Description: A breast x-ray or mammogram is the best way to detect breast cancer in its earliest stages. A mammogram every two years is recommended for women over 50 years of age. Date: Mar 2006

Title: Family history and breast cancer
Publisher: National Breast Cancer Centre (NBCC)
Description: Risk factors for developing breast cancer include having a genetic or family history; getting older or having been diagnosed with breast cancer or DCIS. Date: Nov 2004

Title: Risk factors - Family history and genetics - breasthealth
Publisher: National Breast Cancer Centre (NBCC)
Description: Breast cancer risk factors include genetic or family history. Date: Oct 2003

Title: Nutritional supplements
Publisher: The Jean Hailes Foundation
Description: For women aged 40 and over dietary recommendations include general food guidelines, such as The Australian guide to healthy eating, and specific nutrient recommendations, as outlined in the Recommended dietary intakes for use in Australia. Date: Jul 2003

Title: Managing healthy women at risk of breast cancer
Publisher: Australian Prescriber
Description: Several risk factors for breast cancer have been identified. The most important of these are ageing and a positive family history. Optimal breast cancer prevention strategies in high-risk women are still to be determined and are the subject of ongoing clinical trials. Date: Dec 2002

Title: Breast health
Publisher: The Cancer Council Victoria
Description: Contents: Breasts; breast changes; breast care; common breast problems; breast cancer; breast cancer risk; finding breast cancer early.

Related Topics

[1.1 Key Statistics](#)

[1.2 Tasmanian Statistics](#)

[1.4 Prevention](#)

[1.5 Screening](#)

[1.6 Genetic Clinical Services](#)

Risk Factors *cont'd*

Title: Benefits of breast feeding
Publisher: myDr
Description: Studies show that women who breast feed have a reduced risk of developing breast cancer later in life.
Date: May 2002

Title: Phytoestrogens and breast cancer in postmenopausal women: A case control study
Publisher: Healthy Eating Club
Description: Examines the association between isoflavones, androgens, and dietary composition and the risk of breast cancer in Australian post-menopausal women.
Date: Oct 2001

Title: Breast cancer facts and figures
Publisher: myDr
Description: Discover some fast facts about breast cancer.
Date: Mar 2001

Title: Guidelines for the surgical management of breast cancer
Publisher: Royal Australasian College of Surgeons
Description: These College guidelines consist of systematically developed statements about selected key issues in breast cancer. They have been developed by surgeons, with extensive input from other specialists involved in the management of breast cancer, and from consumers.
Date: Sep 1997

Acknowledgements

Healthinsite is an Australian Government initiative, funded by the [Australian Government Department of Health and Ageing](#). It aims to improve the health of Australians by providing easy access to quality information about human health.

<http://www.healthinsite.gov.au/static>

Related Topics

- [1.1 Key Statistics](#)
- [1.2 Tasmanian Statistics](#)
- [1.4 Prevention](#)
- [1.5 Screening](#)
- [1.6 Genetic Clinical Services](#)

Prevention

To date, there is still no known absolute measure to prevent breast cancer. Sometimes, in extreme cases, women who are at extremely high risk of developing breast cancer (say from a strong family history or having one of the genes that increase risk) have made the decision to have preventive surgery and have both breasts removed, even though there were no signs of cancer at the time. This reduces their risk of developing breast cancer by 90 per cent or more.

Although the risk factors of ageing or positive family history of breast cancer can't be altered, other defensive measures can be taken. These include having regular screening and being breast aware.

Lifestyle factors which may increase the risk of breast cancer such as alcohol consumption and diet can be changed.

Mammograms

[BreastScreen](#) Australia states that regular 2-yearly mammograms are the best way for women aged 50-69 to detect breast cancer early, which improves the chances of successful treatment and recovery.

Exercise

Recent research has suggested that undertaking regular exercise, especially during adolescence and young adulthood, and maintaining a healthy body weight may decrease the risk of developing breast cancer.

Related Topics

[1.1 Key Statistics](#)

[1.2 Tasmanian Statistics](#)

[1.3 Risk Factors](#)

[1.5 Screening](#)

[1.6 Genetic Clinical Services](#)

Prevention *cont'd*

Diet

Controlling weight, especially after menopause, and eating a healthy diet is the advice recommended for reducing risk. Increased intake of some dietary components, such as phytoestrogens (such as found in soy), fibre, lycopene (an antioxidant found in tomatoes), and vitamins A (eg. from beta carotene), C and E, is said to lower the risk of breast cancer. These claims are controversial - studies have produced mixed results, although there is no doubt that a varied diet rich in fruit and vegetables helps a person stay healthy.

Acknowledgements

Extracts reproduced with permission from www.mydr.com.au. Copyright CMPMedica Australia 2006.

Related Topics

- [1.1 Key Statistics](#)
- [1.2 Tasmanian Statistics](#)
- [1.3 Risk Factors](#)
- [1.5 Screening](#)
- [1.6 Genetic Clinical Services](#)

Breast Screening

A screening mammogram is an x-ray of the breast. It is the best way of detecting breast cancer at its earliest stages. Early detection of breast cancer offers a better chance of successful treatment and recovery.

Breast screening for women aged 50—69 is recommended.

Scientific evidence is not strong enough to recommend regular screening mammograms for women aged 40-49 (unless they have a family history of breast cancer) although they may request a free screening mammogram at Breast-Screen Australia.

The breast tissue in women before the menopause is dense and makes mammograms difficult to read, so women under 40 do not usually have regular screening mammograms. Young women with a strong family history or symptoms should ask their doctor for a diagnostic breast x-ray. As should any woman who develops a breast symptom.

Related Topics

- [1.1 Key Statistics](#)
- [1.2 Tasmanian Statistics](#)
- [1.3 Risk Factors](#)
- [1.4 Prevention](#)
- [1.6 Genetic Clinical Services](#)

Breast Screening and Assessment in Tasmania

Provides free breast screening and follow up assessment services for all eligible women.

Breast Screen Booking **Phone: 13 20 50**

Eligibility Information

Who should have a screening mammogram?

BreastScreen is State / Australian government funded to provide free screening mammograms every two years. The target population is women aged 50-69. All women over the age of 40 are eligible to attend.

Screening mammograms are not available for women under 40.

More Information

The following fact sheets are available for more information:

- Breast Awareness
- Breast Screen Booking Details
- BreastScreen Explained - 'No more excuses'
- Breast Pain
- Relaxation Brochure - 'You have been called back'
- Called to Assessment
- Waiting for results
- Mammograms 40 - 49
- Mammograms after 75
- An Order form for Print Material is also available

Further information:

[Early detection of breast cancer](#) National Breast Cancer Centre

Related Topics

[1.1 Key Statistics](#)

[1.2 Tasmanian Statistics](#)

[1.3 Risk Factors](#)

[1.4 Prevention](#)

[1.6 Genetic Clinical Services](#)

Genetic Clinical Services

Family cancer clinics provide a service for people with a family history of cancer and their health professionals. After collecting and thoroughly assessing detailed information about a woman's family history of cancer these clinics provide:

- Information about a person's risk of developing cancer
- An estimate of the likelihood of carrying an inherited mutation in a cancer predisposing gene.
- Counselling and support.
- Advice about possible strategies that might help reduce the risk of cancer.
- Information about early detection of cancer.
- If appropriate, the offer of genetic testing.

Further Information:

Clinical Genetics Service Tasmania Royal Hobart Hospital

Royal Hobart Hospital HOBART TASMANIA 7000

Telephone: 03 6222 8296 Fax: 03 6222 7961

Contact person: Dr Jo Burke, Sonya Bacic (Genetic Counsellors)

Services offered:

- Risk Assessment
- Management Advice
- Predictive Testing
- Breast Screening Program
- Genetic Counselling
- Referral for predictive testing

Related Topics

[1.1 Key Statistics](#)

[1.2 Tasmanian Statistics](#)

[1.3 Risk Factors](#)

[1.4 Prevention](#)

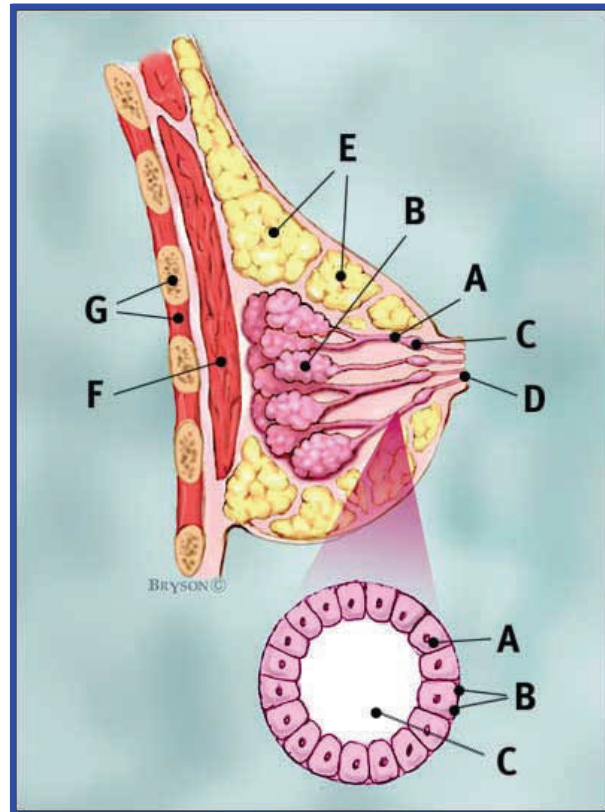
[1.5 Screening](#)

2. THE BREAST

2.1 Breast Anatomy

2.2 Breast Changes

Breast Anatomy



Breast profile:

- A ducts
- B lobules
- C dilated section of duct to hold milk
- D nipple
- E fat
- F pectoralis major muscle
- G chest wall/rib cage

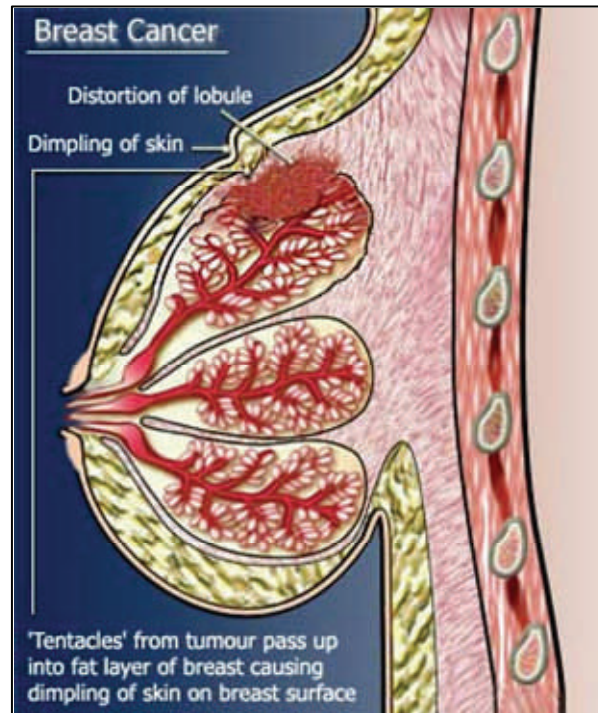
Enlargement:

- A normal duct cells
- B basement membrane
- C lumen (centre of duct)

Reproduced from: <http://www.breastcancer.org>

Related Topics
[2.2 Breast Changes](#)

Breast Anatomy: skin dimpling

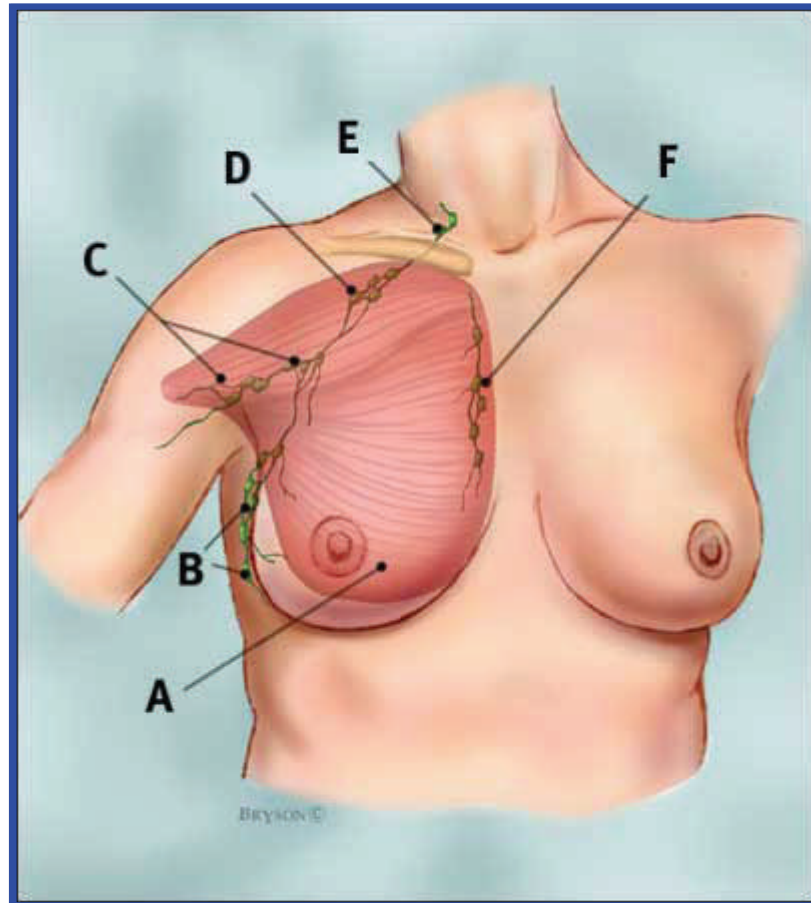


Acknowledgements:

Reproduced with permission from www.mydr.com.au. Copyright CMPMedica Australia 2006.

Related Topics
[2.2 Breast Changes](#)

Axillary Lymph Nodes



Lymph node areas adjacent to breast area.

- A** pectoralis major muscle
- B** axillary lymph nodes: levels I
- C** axillary lymph nodes: levels II
- D** axillary lymph nodes: levels III
- E** supraclavicular lymph nodes
- F** internal mammary lymph nodes

Reproduced from: <http://www.breastcancer.org>

Related Topics
[2.2 Breast Changes](#)

Breast Changes

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

From time to time a woman or her doctor may find breast changes such as:

- A lump or lumpiness.
- Any change in the shape or appearance of the breast such as dimpling or redness.
- An area that feels different to the rest.
- A discharge from the nipple.
- Any change in the shape or appearance of the nipple such as pulling in or scaliness (nipple inversion or retraction).
- Pain

Many women are concerned that a breast change might be breast cancer. Even though this will not be true in most cases, it is very important that all breast changes are carefully investigated. If it is cancer, finding it early will mean a much better chance of effective treatment.

Investigating breast changes

What investigations will the doctor suggest?

It is recommended that the doctor uses an approach known as the triple test to find the cause of a breast change. However, it should be noted that many women with breast changes will not need all of these tests.

The **triple test** includes:

- [clinical breast examination](#) and taking a personal history
- [imaging tests](#) i.e. mammography, ultrasound or MRI

Related Topics
[2.1 Breast Anatomy](#)

Breast Changes *cont'd*

- [non-surgical biopsy](#); i.e. a fine needle aspiration and core biopsy.

This is when a sample of cells or tissue is extracted from the lump.

Most women show no signs of cancer on any of the tests. The small number who do show possible signs of cancer on one or more of the tests may be advised to see a surgeon and may have an open surgical biopsy.

How accurate is the triple test?

No single test will be able to find every cancer. However, if all three tests are done and none shows signs of cancer, it is very unlikely that cancer is present. If all three tests are performed, more than 99.5% of cancers will be found by one or more of the tests.

Clinical breast examination

The doctor can tell much about the likely causes of a breast change from this test, which provides a thorough examination of the whole breast area, including the armpits and up to the collarbone.

After the woman has removed all clothing from the upper half of her body, the doctor may look at her breasts while she is seated or standing to see whether any changes are visible. Following this, she may be asked to lie down, so the doctor can examine both breasts and nipples as well as the armpits. If necessary the doctor will organise a referral to a surgeon.

Imaging tests

The next step may be an imaging test, which is mammography or ultrasound. (See Section 1.5: [Breast Screening](#)). For some women, both tests may be needed to gain enough information about the breast change.

Related Topics
[2.1 Breast Anatomy](#)

Breast changes *cont'd*

Non-surgical biopsy

If a woman has a lump or lumpiness which is not caused by hormonal changes or a cyst, she may have a fine needle aspiration biopsy or a core biopsy. This is the third part of the triple test. In these tests, a small sample of the cells from the lump or area of breast change are examined to determine the types of cells that are present.

Open surgical biopsy

If any of the tests show signs of cancer, the woman will be referred to a surgeon and she may have a surgical biopsy. This test is used to provide the most accurate information about whether a cancer is present or not. An open biopsy is usually performed at a hospital or a day surgery clinic, in most cases under a general anaesthetic.

Causes of breast changes

The vast majority of breast changes are not breast cancer. If you find a lump or other change in your breast or nipple it might be caused by the following.

Hormonal changes

Hormones produced by glands in the body make a woman's breast feel different at various times during her menstrual cycle. Women who have been through menopause and are not taking hormone replacement therapy, or who have had their ovaries removed, no longer have breast changes due to hormonal activity. Hormonal changes may cause women to have swollen, painful or tender breasts at different times in their cycle; these are not a sign of breast cancer and usually do not require treatment. However, treatments are available for hormonal breast pain from the doctor, if needed. It may be useful to keep a record of breast

Related Topics

[2.1 Breast Anatomy](#)

Breast changes *cont'd*

changes prior to menstruating over a couple of months to see whether there is any pattern to the changes.

Cysts

A cyst is a fluid-filled sac. Fluid is produced and absorbed by the breast as part of the usual cycle of hormonal breast changes. Although we don't know why some women are more susceptible to breast cysts than others, we do know they are common in women aged 35 to 50 and in women who are taking hormone replacement therapy.

Simple cysts are not cancer and do not change into cancer. However, in rare cases, cysts may have a cancer growing within them or close to them. These changes can be seen on an ultrasound, or found after a cyst is aspirated or drained. Many women have a cyst or a number of cysts without knowing it, and they do not usually require treatment. Some women first detect their cyst as a painful lump and they may decide to have it drained if it is painful or troublesome. This is done by inserting a fine needle into the cyst to draw out the fluid, and is usually a simple and fairly painless procedure.

Fibroadenomas

A fibroadenoma is a smooth, firm breast lump made up of fibrous and glandular tissue. The term "breast mouse" is also used to refer to a fibroadenoma. We do not know the cause of fibroadenomas; however, they are not cancer and rarely change into breast cancer. Fibroadenomas are more common in younger women and may become tender in the days before a period or grow bigger during pregnancy. Women have a choice about whether to have their fibroadenoma removed, but if it is monitored and continues to enlarge, it should be removed.

Related Topics

[2.1 Breast Anatomy](#)

Most often, younger women or those with smaller fibroadenomas will not have them taken out. The operation to remove a fibroadenoma is relatively simple. A general anaesthetic is usually required.

Further information:

[Do you have a breast change?](#) National Breast Cancer Centre

This information brochure is to help you better understand the cause of breast changes and the tests which may be needed to find the cause of your breast change.

[Breast changes: what you need to know](#) National Breast Cancer Centre

Provides information to help women better understand what breast changes are, how the doctor may investigate breast changes, and how to make sure they are receiving the best health care available.

[Breast changes](#) National Breast Cancer Centre

Related Topics

[2.1 Breast Anatomy](#)

3. TYPES OF BREAST CANCER

3.1 Pre-Invasive

Ductal carcinoma in situ

Lobular carcinoma in situ

3.2 Invasive

Early

Locally Advanced

Metastatic

3.3 Other

Inflammatory

Paget's Disease

Pre-Invasive Breast Cancer

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

‘Pre-invasive’ breast cancer is the name for abnormal cells or cancer cells that stay inside the milk ducts or milk sacs (lobules) of the breast. **Ductal carcinoma in situ (DCIS)** and **lobular carcinoma in situ (LCIS)** are types of pre-invasive breast cancer. Invasive breast cancer is the name for cancer cells that have spread outside the milk ducts or milk sacs into the surrounding breast tissue. Invasive breast cancer cells have the potential to spread outside the breast to other parts of the body. Early breast cancer, locally advanced breast cancer, and metastatic breast cancer are all types of invasive breast cancer.

Related Topics

[3.2 Invasive](#)

[3.3 Other](#)

Ductal carcinoma in situ (DCIS)

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

Having DCIS increases the risk (chance) of developing invasive breast cancer. It's important to treat DCIS, to lower the risk of developing invasive breast cancer.

About 1200 women are diagnosed with DCIS each year in Australia. Because DCIS cannot usually be felt as a breast lump or other breast change, most cases are found by routine screening with mammograms. Most women are not aware of any symptoms at the time of diagnosis.

DCIS can be found in women at any age, however, most women are between 50 and 59 years old when their DCIS is found. DCIS can also develop in men although this is very rare.

The introduction of mammographic screening programs for breast cancer has seen an increase in the diagnosis of ductal carcinoma in situ (DCIS). The benefit of finding DCIS is that steps can be taken to prevent it developing into invasive breast cancer. The down side is that many women will receive significant treatments for a condition that may or may not develop into invasive disease.

Many women feel confused about the difference between a diagnosis of DCIS and invasive breast cancer.

The information is based on the evidence available at the time of publication.

Related Topics

[3.2 Invasive](#)

[3.3 Other](#)

Ductal carcinoma in situ (DCIS) *cont'd*

New treatments are continually being developed and might be introduced in the future. If you hear about any technologies and treatments that are not mentioned here, please ask your doctor for more information.

If a woman is diagnosed with [invasive breast cancer](#) at the same time as DCIS, this information does not apply.

Publications:

[Ductal carcinoma in situ—Understanding your diagnosis and treatment](#) - National Breast Cancer Centre

Related Topics

[3.2 Invasive](#)

[3.3 Other](#)

Lobular carcinoma in situ (LCIS), Atypical lobular hyperplasia (ALH) and Atypical ductal hyperplasia (ADH)

Adapted from the National Breast Cancer Centre (NBCC website) :
www.nbcc.org.au

See the [diagram of the breast](#)

Sometimes, cells on the inside of the lobules or ducts become abnormal in shape and size and begin to multiply in an uncontrolled way.

If the abnormal cells stay inside the lobules in the breast this is called Lobular carcinoma in situ (LCIS) or Atypical lobular hyperplasia (ALH). In LCIS, there are more abnormal cells in the lobule than in ALH. If the abnormal cells stay inside the ducts in the breast, this is called Atypical ductal hyperplasia (ADH). There is another pre-invasive breast disease called ductal carcinoma in situ (DCIS) (See [DCIS](#)) that affects the breast ducts. However, in DCIS there are more abnormal cells in the duct than in ADH and some DCIS cells look and behave differently.

How are LCIS, ALH and ADH found?

LCIS, ALH and ADH cannot be felt as a breast lump or other breast change, and only sometimes show up on a mammogram image (X-ray of the breast). These conditions are usually found by chance when a woman has a breast biopsy (removal of some tissue from the breast) for some other reason.

What does a diagnosis of LCIS ALH or ADH mean?

Most women diagnosed with these conditions do not develop breast cancer. It is not possible to say exactly how much higher the risk of developing breast cancer

Related Topics

[3.2 Invasive](#)

[3.3 Other](#)

Is for a particular woman. Studies have shown that the risk of developing breast cancer is about four times higher for women with ALH or ADH compared with women who do not have ALH or ADH. The risk of developing breast cancer is up to nine times higher for women with LCIS compared with those who do not have LCIS. Each woman's risk is also affected by other things, such as her age, and whether she has a family history of breast cancer.

Is treatment needed for LCIS ALH or ADH?

If LCIS, ALH or ADH is diagnosed and there are no other abnormal changes in the breast, no treatment is needed.

However, because of the increased risk of breast cancer, it's important for there to be regular check-ups, which should be arranged through the woman's doctor. Regular check-ups include:

- physical examination by the doctor of both breasts once a year
- a mammogram and/or ultrasound of both breasts once a year.

If any changes in the breasts are noticed, such as: a breast lump; a change in the shape, texture or skin of the breast, or a change to the nipple, the woman should see her doctor immediately.

Further Information:

[Lobular carcinoma in situ and atypical hyperplasias of the breast: understanding your diagnosis](#) National Breast Cancer Centre

Related Topics

[3.2 Invasive](#)

[3.3 Other](#)

Invasive: Early Breast Cancer

Adapted with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

Important facts about early breast cancer

- Early breast cancer can be treated successfully, and most women diagnosed and treated for early breast cancer do not die from the disease.
- Early breast cancer is cancer that is contained in the breast, and may or may not have spread to the lymph nodes in the breast or armpit area. It is possible that some cancer cells may have spread outside the breast and armpit area, but cannot be detected.

Treatment for early breast cancer

- The aim of treatment for early breast cancer is to remove the cancer from the breast and armpit area, and to destroy any cancer cells that may have spread to other parts of the body, but cannot be detected.
- Every woman's situation and breast cancer is different. Treatment that is best for one woman may not be suitable for another woman.
- Deciding on the most appropriate treatment/s for each situation means weighing up, with doctors, the possible benefits and side effects of each treatment. Someone diagnosed with breast cancer should give themselves a week or two to decide about the treatment options. Taking this time does not put the person at risk.

Related Topics

[3.1 Pre-Invasive](#)

[3.3 Other](#)

Early Breast Cancer *cont'd*

Treatment for early breast cancer usually involves either: [breast conserving surgery](#) followed by radiotherapy, or [mastectomy](#) (sometimes followed by [radiotherapy](#)).

Further Information:

[A guide for women with early breast cancer](#) National Breast Cancer Centre

Related Topics

[3.1 Pre-Invasive](#)

[3.3 Other](#)

Locally Advanced Breast Cancer

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

Locally advanced breast cancer is the name for breast cancer that is larger than 5cm and may have spread from the breast into the lymph nodes or other tissues next to the breast.

Locally advanced breast cancer is diagnosed using the same tests as advanced breast cancer.

Treatment for locally advanced breast cancer usually involves a combination of surgery, radiotherapy, chemotherapy and/or hormonal therapy.

Regular follow-up after treatment is recommended so that if the cancer comes back it can be found and treated as soon as possible.

Related Topics

[3.1 Pre-Invasive](#)

[3.3 Other](#)

Metastatic Breast Cancer

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

Locally advanced breast cancer is the name for breast cancer that is larger than 5cm and may have spread from the breast into the lymph nodes or other tissues next to the breast.

Locally advanced breast cancer is diagnosed using the same tests as advanced breast cancer.

Treatment for locally advanced breast cancer usually involves a combination of surgery, radiotherapy, chemotherapy and/or hormonal therapy.

Regular follow-up after treatment is recommended so that if the cancer comes back it can be found and treated as soon as possible.

Every woman's cancer is different, and the way the cancer develops will be different for each woman. For some women, living with a diagnosis of metastatic breast cancer is similar to living with a chronic illness.

Although the present treatments for metastatic breast cancer cannot cure the cancer, they can improve the quality of life and may increase the length of life. There are many treatments available for women diagnosed with metastatic breast cancer. Treatment may include one or more of the following: hormonal therapies, chemotherapy, radiotherapy, surgery and other drug treatments to help relieve symptoms.

Related Topics

[3.1 Pre-Invasive](#)

[3.3 Other](#)

Metastatic Breast Cancer *cont'd*

Further Information:

For more information about treatment, support services and practical issues call The Cancer Council Tasmania's Cancer Helpline on **13 11 20**.

[A guide for women with metastatic breast cancer](#) National Breast Cancer Centre

Related Topics

[3.1 Pre-Invasive](#)

[3.3 Other](#)

Other Breast Cancers: Inflammatory

Reproduced from the Breast Cancer Institute NSW (NBCC website):
www.bci.org.au

What Is Inflammatory Breast Cancer?

Inflammatory cancer is breast cancer that presents with signs and symptoms similar to inflammation or infection of the breast. The typical symptoms are swelling, redness and tenderness, which may affect a localised area or the whole of the breast. Often there is no lump or abnormality to feel, or there is just a diffuse area of thickening in the breast. Inflammatory cancer classically causes “peau d’orange”- dimpling of the skin like orange peel.

Inflammatory breast cancer is often mistaken for mastitis, or non-cancerous infection of the breast. Often it is initially treated with antibiotics, with some improvement, however it fails to respond rapidly and completely to antibiotics as an infection typically does.

Histologically (under the microscope), inflammatory breast cancer (like all breast cancers), is most commonly of ductal origin. The word “inflammatory” refers to the way the cancer presents itself, rather than representing a separate pathological class of breast cancer. It is a particularly aggressive form of breast cancer. There is a theory that it invades the lymphatic channels very early, producing the classical inflammatory clinical features.

How Common is Inflammatory Breast Cancer?

Inflammatory cancer is rare. It accounts for approximately 0.5% of breast cancer.

Related Topics

[3.1 Pre-Invasive](#)

[3.2 Invasive](#)

Inflammatory *cont'd*

Further Information:

[What Is Inflammatory Breast Cancer?](#) - Breast Cancer Institute of NSW

[Inflammatory breast cancer](#)— Cancerbackup—UK

[Inflammatory breast cancer](#)— Breast Cancer Network Australia

[Inflammatory breast cancer](#)— Cancerhelp UK

Related Topics

[3.1 Pre-Invasive](#)

[3.2 Invasive](#)

Paget's Disease

This unique type of breast cancer only accounts for three per cent of all breast cancer. It involves the nipple and areola, and often includes abnormal scaling and redness of the skin of the nipple and areola. Women may also experience burning or itching.

Pagetoid invasion of the nipple and areola by individual or small groups of neoplastic cells is usually associated with a subareolar area of DCIS. Occasionally, the DCIS may be more distant. Associated occult subareolar or more distant invasive breast cancer should be considered.

Any unusual changes to the breast should always be brought promptly to the attention of the person's doctor.

Further Information:

For information on the management and treatment of Paget's disease of the nipple, see the National Breast Cancer Centre Publication:

[The clinical management of ductal carcinoma in situ, lobular carcinoma in situ and atypical hyperplasia of the breast](#) —
National Breast Cancer Centre

[Paget's cancer disease of the breast](#) — Cancerbackup—UK

[Paget's disease](#)— Cancerhelp UK

Related Topics

[3.1 Pre-Invasive](#)

[3.2 Invasive](#)

4. CLINICAL PRACTICE GUIDELINES

4.1 Early Breast Cancer

4.2 Advanced

4.3 Psychosocial

4.4 Younger Women

4.5 Publication Information

Early Breast Cancer Clinical Practice Guidelines

[*Clinical practice guidelines for the management of early breast cancer*](#) is a document useful for both health professionals and consumers. It is designed to:

- assist in decision-making by women and their doctors;
- educate all involved in the care of women with breast cancer;
- assess and assure the quality of care;
- reduce the risk of legal liability by improving care; and
- bring the issue of cost-effectiveness into the public arena.

This **resource** presents guidelines, and does not pretend to be a textbook. Clinicians looking for further information on the biology and natural history of breast cancer should consult the relevant texts.

The guidelines are not rigid procedural paths, nor are they prescriptive. They aim to provide information on which decisions can be made, rather than dictate what the decisions should be.

The guidelines are designed to provide information to assist decision making and are based on the best evidence available at time of publication. They are a guide to appropriate practice, to be followed subject to the clinician's judgment and the woman's preference in each individual case.

The Summary guidelines for the management of early breast cancer is on pages 7—10.

Related Topics

- [4.2 Clinical Practice Guidelines Advanced](#)
- [4.3 Clinical Practice Guidelines Psychosocial](#)
- [4.4 Clinical Practice Guidelines Younger Women](#)
- [4.5 Publication Information](#)

Advanced Breast Cancer Clinical Practice Guidelines

Advanced breast cancer includes both locally advanced and metastatic breast cancers.

The Clinical Practice Guidelines for the Management of Advanced Breast Cancer were developed by a multidisciplinary working party, which was rigorous in seeking the best available evidence, including research published up to mid-2000.

The Guidelines are primarily intended for use by all health professionals involved in the management of women with advanced breast cancer.

Breast cancer has a longer developmental history than many other common cancers and often takes the form of a chronic illness.

While recognising that there is a clear need for high level professional skills in diagnosis and management, careful attention has also been given to a patient's emotions, psychosocial inter-relationships and general well being.

The Guidelines aim to provide material that will be helpful and supportive to those managing the difficult range of problems that may present in advanced breast cancer.

The Summary of guidelines for the management of advanced breast cancer is on pages 5—12

Related Topics

- [4.1 Clinical Practice Guidelines Early](#)
- [4.3 Clinical Practice Guidelines Psychosocial](#)
- [4.4 Clinical Practice Guidelines Younger Women](#)
- [4.5 Publication Information](#)

Psychosocial Care of Adults with Cancer—Clinical Practice Guidelines

An estimated 50,000 Australians suffer anxiety or depression each year following a diagnosis of cancer.

Until now these consequences of cancer have gone largely undetected and untreated because health professionals have had little education or training about these problems or good evidence on how they can best be prevented and managed.

The Guidelines describe the opportunities health professionals have to ensure that patients don't experience serious, long-term clinical disorders such as depression and anxiety. Further, where cancer patients do experience these problems, the Guidelines provide an evidence-based guide to detecting them and ensuring patients get the right type of referral and expert treatment.

The Summary of evidence for the psychosocial care of adults with cancer is on pages 7 –10

Related Topics

- [4.1 Clinical Practice Guidelines Early](#)
- [4.2 Clinical Practice Guidelines Advanced](#)
- [4.4 Clinical Practice Guidelines Younger Women](#)
- [4.5 Publication Information](#)

Younger women with breast cancer—Clinical Practice Guidelines

Approximately 6% of new breast cancer cases diagnosed in Australia each year are in women aged 40 years or younger. Although incidence is lower in younger women compared with their older counterparts, younger women are more likely to be diagnosed with larger, more aggressive tumours, and have worse disease-free and overall survival outcomes. Younger women are also more likely to experience psychological distress following diagnosis.

The [*Clinical Practice Guidelines for the Management and support of younger women with breast cancer*](#) have been developed to complement the other existing guidelines. The guidelines focus on issues that are specific to the age and / or life stage of younger women, and aim to assist younger women and their doctors in making decisions about all aspects of breast cancer care.

The Summary of guidelines for the management of younger women with breast cancer are on pages 4—5

Related Topics

[4.1 Clinical Practice Guidelines Early](#)

[4.2 Clinical Practice Guidelines Advanced](#)

[4.3 Clinical Practice Guidelines Psychosocial](#)

[4.5 Publication Information](#)

Publication Information

[Clinical practice guidelines for the psychosocial care of adults with cancer](#)

Author: National Breast Cancer Centre 2003

Publisher: National Health and Medical Research Council (NHMRC)

Copies of this publication can be ordered through the National Breast Cancer Centre on their toll free number: 1800 624 973

[Clinical practice guidelines for the management of advanced breast cancer](#)

Author: National Breast Cancer Centre 2001

Publisher: National Health and Medical Research Council (NHMRC)

For publication purchases please contact Aus Info on their toll free number 132 447

[Clinical practice guidelines for the management of early breast cancer](#)

Author: National Breast Cancer Centre 2001

Publisher: National Health and Medical Research Council (NHMRC)

For publication purchases please contact Aus Info on their toll free number 132 447

[Clinical practice guidelines for the care and support of younger women with breast cancer](#)

Author: National Breast Cancer Centre 2003

Publisher: National Health and Medical Research Council (NHMRC)

Copies of this publication can be ordered through the National Breast Cancer Centre on their toll free number: 1800 624 973

Related Topics

- [4.1 Clinical Practice Guidelines Early](#)
- [4.2 Clinical Practice Guidelines Advanced](#)
- [4.3 Clinical Practice Guidelines Psychosocial](#)
- [4.4 Clinical Practice Guidelines Younger Women](#)

5. SURGERY OPTIONS

Surgery for invasive breast cancer

5.1 Breast Conservation

Comparison of Breast Conserving Surgery with Mastectomy

5.2 Sentinel Node Biopsy

5.3 Mastectomy

5.4 Axillary Dissection

5.5 Breast Reconstruction

5.6 Surgical Complications

Surgery for invasive breast cancer

This section reproduces information from the publication [The Clinical Practice Guidelines for the Management of Early Breast Cancer](#). Chapter 4 pp. 51 – 53

The aim of surgery for primary breast cancer is to eradicate the primary tumour and any local extension in the hope of achieving total disease control.

Indirect evidence suggests that surgical intervention may extend survival from the time of clinical detection.(p.51).

The surgical treatment of primary breast cancer has devolved into two basic procedures:

- Complete local excision (CLE) with axillary dissection
- Total mastectomy with axillary dissection” (p 51).

Related Topics

[5.1 Breast Conservation](#)

[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.5 Breast Reconstruction](#)

[5.6 Surgical Complications](#)

Breast Conserving Surgery

This section reproduces information from the publication [The Clinical Practice Guidelines for the Management of Early Breast Cancer](#) . Chapter 4 pp 51 – 52

Breast Conserving surgery demands CLE (complete local excision), which by definition means clear histological margins with a rim of normal breast tissue around the periphery of the primary tumour on all sides. This procedure is suitable for tumours which are unifocal and in which clear margins can be obtained, if necessary by including overlying skin. All the requirements of treatment must be taken into account when planning the incision.

There is no absolute limit to the size of a tumour which can be locally excised without incurring a high risk of recurrence; 3—4cm is often regarded as a practical limit. The aim of treatment is to maximise control of the disease and decrease the impact of breast cancer on the woman's quality of life. However, the relativity of tumour size to breast size and the achievement of an acceptable cosmetic result are equally important considerations.

Related Topics

[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.5 Breast Reconstruction](#)

[5.6 Surgical Complications](#)

Comparison of Breast Conserving Surgery with Mastectomy

Ch 4 pp 53—55

Pre-operatively, about 70 per cent of mammographically detected cancers and 50 per cent of clinically detected cancers appear suitable for breast conservation and this option should be discussed with the woman.

Numerous randomised, controlled clinical trials have demonstrated no difference in distant metastases or survival among women with operable breast cancer treated by mastectomy compared with those treated by breast conserving surgery (Level I), when both have included axillary dissection.

The incidence of local recurrence is 1-2 per cent per year in women who have breast conserving surgery followed by radiotherapy. In comparable tumours, the incidence of local recurrence following mastectomy is 3—5 per cent at 10 years, or less than 0.5 per cent per year.

The choice of surgery is an individual one and each woman should be fully informed of her options, including the risks and benefits of each procedure. The woman should be informed that local recurrence can occur even in surgery properly performed and she should be made aware of the potential need for further surgery if the margins are positive.

The cosmetic result of breast conserving surgery has a high level of acceptance, gives an opportunity to preserve the breast shape, avoids the need

Related Topics

[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.5 Breast Reconstruction](#)

[5.6 Surgical Complications](#)

Comparison of Breast Conserving Surgery with Mastectomy *cont'd*

prosthesis or reconstructive surgery, facilitates a better fit of clothing and in general is associated with less impact on body image and sexuality. These are factors which may influence a woman's decision in favour of breast conserving surgery. In discussion of choice between breast conserving surgery and mastectomy, a woman should be informed that body image is better preserved with conservation surgery (Level I).

Guideline	Level of evidence	Reference
In discussion of choice between breast conserving surgery and mastectomy, women should be informed that body image is better preserved with conservation surgery.	I	207

Specific situations in which mastectomy may be preferred to breast conserving surgery include:

- A tumour of such a size relative to the breast that a satisfactory cosmetic result may not be obtained
- Multifocal disease
- Co-existence of extensive intraductal carcinoma or DCIS which is of high grade and which cannot be excised with clear margins
- Prior radiation therapy to the breast
- Previous history of collagen disease, particularly scleroderma
- Widespread indeterminate micro-calcification within the breast, which may make mammographic follow-up difficult

Studies comparing breast conserving surgery and mastectomy have shown

Related Topics

[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.5 Breast Reconstruction](#)

[5.6 Surgical Complications](#)

Comparison of Breast Conserving Surgery with Mastectomy Ch 4 pp 53—55

similar psychological morbidity for both procedures, even twelve months after surgery (Level III). However, an influential factor during the first twelve months appears to be choice, with those offered a choice of surgery experiencing fewer psychological difficulties in the first 12 months than those who were not (Level III). This was not evident three years after surgery.

Regardless of surgery type, some women will suffer problems with sexuality, although there is some evidence that this effect is less marked in women having breast conserving therapy. The most consistent finding is that body image is much better in women who have breast conserving surgery. Further research is needed to elucidate the impact of different forms of surgery on physical health, anxiety, depression and global quality of life. (pp. 51-52).

Further Information:

Guideline	Level of evidence	Reference
Where appropriate women should be offered a choice of either breast conserving surgery followed by radiotherapy or mastectomy, as there is no difference in the rate of survival or distant metastasis	I	195

The NSW Breast Cancer Institute has produced a number of good leaflets on a range of topics. This information is directed at the consumer.

Download leaflet: [Breast Conservation](#)

Related Topics

- [5.2 Sentinel Node Biopsy](#)
- [5.3 Mastectomy](#)
- [5.4 Axillary Dissection](#)
- [5.5 Breast Reconstruction](#)
- [5.6 Surgical Complications](#)

Sentinel Node Biopsy

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

Sentinel node biopsy is a new surgical procedure, still being tested in clinical trials. Research conducted to date indicates that it has fewer side effects than the standard surgery to remove lymph nodes (axillary node dissection or axillary clearance).

Sentinel node biopsy is being tested in clinical trials to see:

- if it can accurately find out whether cancer cells have spread to the lymph nodes
- what (if any) side effects it has.

A sentinel node biopsy means surgery to remove the sentinel lymph node or nodes. There can be more than one sentinel node. The sentinel node is the first lymph node that breast cancer cells may spread to outside the breast. In most cases, the sentinel node is in the armpit.

However, sometimes the sentinel node is in a different area of the body, such as a lymph node under the breastbone or above the collar bone.

There are different ways to find the sentinel node. In one technique, a slightly radioactive substance is injected around the breast cancer. Special scans are used before and during surgery to find out which lymph node the radioactive substance has travelled to. This is the sentinel node, and is removed during surgery.

Another technique is to inject a blue dye around the breast cancer. The injection is given in the operating theatre just before breast surgery. The surgeon

Related Topics

[5.1 Breast Conservation](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.5 Breast Reconstruction](#)

[5.6 Surgical Complications](#)

Sentinel Node Biopsy *cont'd*

can see and remove the sentinel node because it turns blue when the dye travels to it. The patient's urine may be blue for the next 24 hours after surgery, and the skin of the breast may be blue. The blue colour will fade over time.

After the sentinel node has been removed, a pathologist examines it for cancer cells. If cancer cells are found, further surgery to remove more lymph nodes, and/or radiotherapy to the area may be needed. If the pathology tests are done during the operation and cancer cells are found, it is sometimes possible to do the additional surgery during the same operation. However, a second operation is sometimes needed.

While sentinel node biopsy has been shown to be an accurate way of finding out whether breast cancer has spread to the lymph nodes in women with early breast cancer, trials are ongoing to investigate its use in larger breast cancers and DCIS. It is important that women discuss the risks and benefits of both procedures with their surgeon before surgery.

Further Information:

Sentinel Node Biopsy p 57 Clinical Practice Guidelines Management of Early Breast Cancer

[Sentinel Node Biopsy \(SNB\) as opposed to Axillary Clearance \(AC\)](#) - Breast Cancer Network Australia

[Sentinal Node Biopsy](#)—NSW Breast Cancer Institute

Related Topics

[5.1 Breast Conservation](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.5 Breast Reconstruction](#)

[5.6 Surgical Complications](#)

Mastectomy pp 52—53

The surgical protocol for a total mastectomy includes complete excision of the breast parenchyma with preservation of the underlying pectoral muscles.

Total mastectomy is an appropriate treatment for women whose tumours extend widely within the breast, have ill defined margins which defy CLE, directly involve the nipple or overlying skin, or who do not choose breast conservation. Nipple involvement does not always preclude breast conservation. In such cases, excision of the central breast tissue, including the nipple, is often feasible. It is reasonable to reconstruct the nipple as a secondary procedure.

Skin sparing and nipple preserving mastectomy with immediate reconstruction may have a place in the treatment of early breast cancer. Although no long-term results of this technique are yet available, early data suggest no increase in the risk of local recurrence when tumours of comparable size are treated by skin sparing mastectomy as opposed to total mastectomy (Level III).

Further Information:

The NSW Breast Cancer Institute has produced a number of good leaflets on a range of topics. This information is directed at the consumer.

Download leaflet: [Mastectomy](#)

Related Topics

- [5.1 Breast Conservation](#)
- [5.2 Sentinel Node Biopsy](#)
- [5.4 Axillary Dissection](#)
- [5.5 Breast Reconstruction](#)
- [5.6 Surgical Complications](#)

Management of the Axilla Including Dissection p 55

Management of the axilla has several aims:

- Eradication of metastatic disease within the axillary nodes
- Assessment of nodal status for evaluation of prognosis
- Assessment of nodal status to determine adjuvant therapy

Both dissection and irradiation are used in managing the axilla. The best approach needs to be considered, as there are side effects from both axillary dissection and axillary irradiation—in particular, lymphoedema. Reported estimates of rates of lymphoedema following axillary surgery (sampling or dissection) and / or axillary irradiation vary widely, reflecting the methodological weaknesses of many of the studies.

Axillary dissection

The extent of axillary dissection can be defined with reference to the pectoralis minor muscle:

- Level 1: lower axilla up to the lower border of pectoralis minor
- Level 2: axillary contents up to the upper border of pectoralis minor
- Level 3 : axillary contents extending to the apex of the axilla

All nodes removed should be sent to the pathologist for examination.

Related Topics

[5.1 Breast Conservation](#)

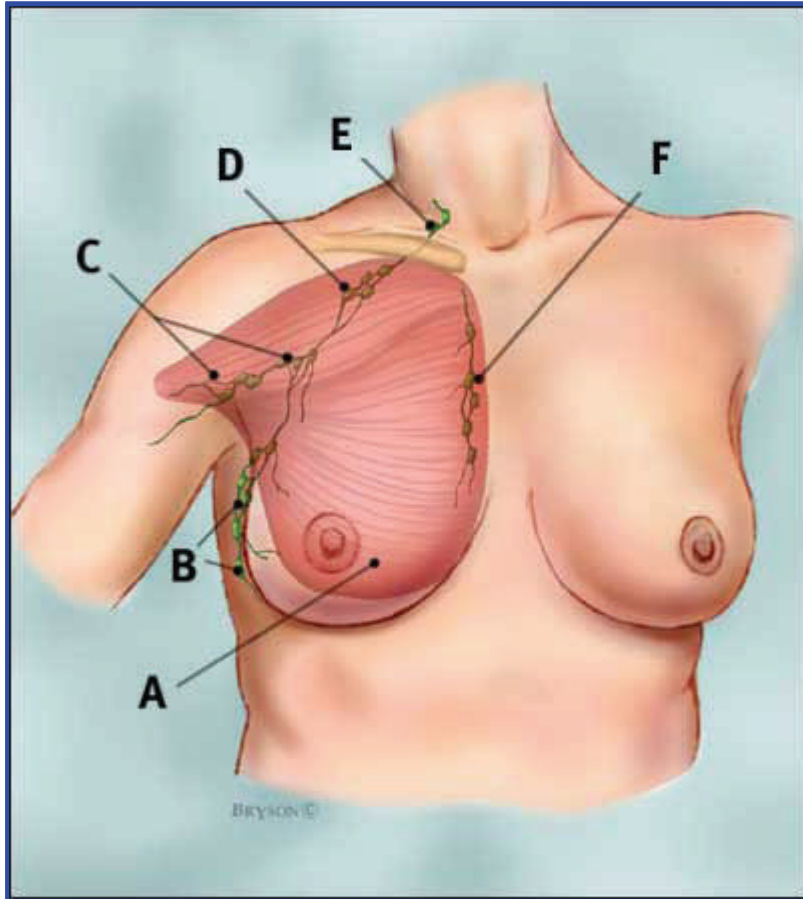
[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.5 Breast Reconstruction](#)

[5.6 Surgical Complications](#)

Axillary Lymph Node dissection



Lymph node areas adjacent to breast area

- A** pectoralis major muscle
- B** axillary lymph nodes: levels I
- C** axillary lymph nodes: levels II
- D** axillary lymph nodes: levels III
- E** supraclavicular lymph nodes
- F** internal mammary lymph nodes

Reproduced from: <http://www.breastcancer.org>

Related Topics

- [5.1 Breast Conservation](#)
- [5.2 Sentinel Node Biopsy](#)
- [5.3 Mastectomy](#)
- [5.5 Breast Reconstruction](#)
- [5.6 Surgical Complications](#)

Breast reconstruction

Adapted from the National Breast Cancer Centre (NBCC website) :
www.nbcc.org.au

If a woman wants to have breast reconstruction it is best for her to discuss this with her doctor as soon as she realises she needs a mastectomy, although, breast reconstruction can be done months to years after a mastectomy or immediately after mastectomy as part of the same operation.

There are two main types, one in which muscle and/or skin are taken from another part of the body eg. the back or stomach or from the unaffected breast based on the breast size and the woman's personal preferences. Either choice may be appropriate in some cases.

It is useful to do the research on this and look at photos and videos, both in relation to the type of operation and to the choice of surgeon.

Depending what is preferred, the nipple and aureola may or may not be added to the reconstructed breast. Reconstruction of the nipple is often deferred until after the breast reconstruction to allow for better placement of the nipple.

Women undertake breast reconstruction for a number of reasons including:

- Maintenance of self-esteem and confidence
- Body image reinforcement
- Sexual attractiveness
- Appearance for professional reasons
- To avoid the inconvenience of a mammary prosthesis which may be uncomfortable in hot weather, especially if the woman plays active sports and swims.

In Australia more younger women opt for breast reconstruction, but it is equally

Related Topics

[5.1 Breast Conservation](#)

[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.6 Surgical Complications](#)

Breast Reconstruction *cont'd*

available to women of all ages who desire it for any of the above reasons.

Ideally the GP or surgeon will initiate a discussion about reconstruction, but all mastectomy patients should feel free to request this option. It is a legitimate request, not a matter of vanity.

Further Information:

Breast reconstruction pp. 60-61 Clinical Practice Guidelines Management of Early Breast Cancer

Breast reconstruction [Questions Most Women Ask](#)— National Breast Cancer Centre

Breast reconstruction video available from: [The Wesley Hospital](#)
Qld Tel: 07 3232 7000 Fax: (03) 3371 6834 Email:
info@wesley.com.au

[Breast reconstruction: your choice](#)— The Cancer Council Tasmania

For a diagram of [TRAM Flap breast reconstruction](#) see *overleaf*

Related Topics

[5.1 Breast Conservation](#)

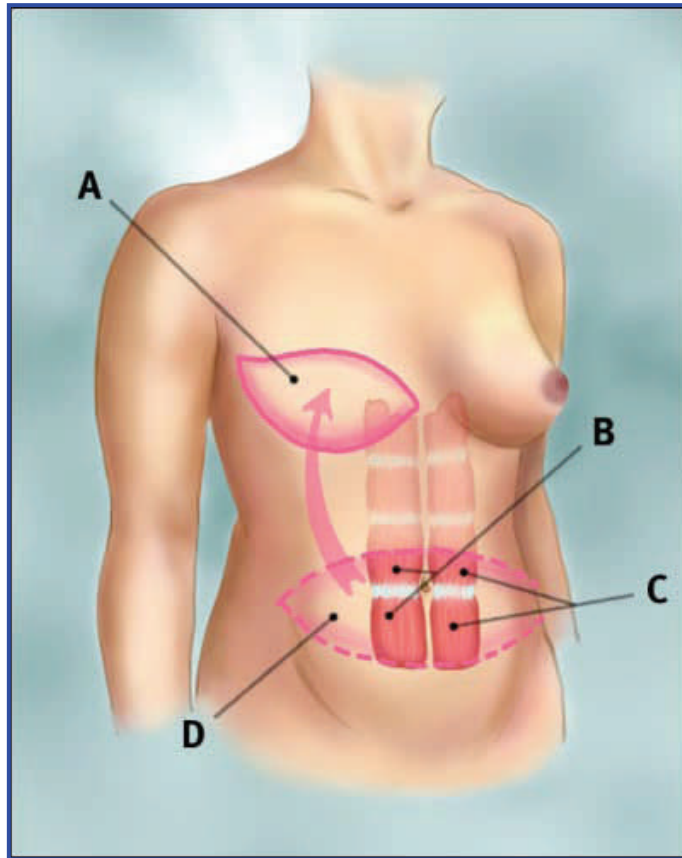
[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.6 Surgical Complications](#)

TRAM Flap Breast Reconstruction - Preparation



Woman after mastectomy, showing trans-rectus abdominis muscle (TRAM) and surrounding tissues, in preparation for reconstruction.

A mastectomy site

B right trans rectus abdominis muscle

C left trans rectus abdominal muscle

D segment of abdominal tissues: skin and fat, to be transferred along with muscle to create the new breast

Reproduced from: <http://www.breastcancer.org>

Related Topics

[5.1 Breast Conservation](#)

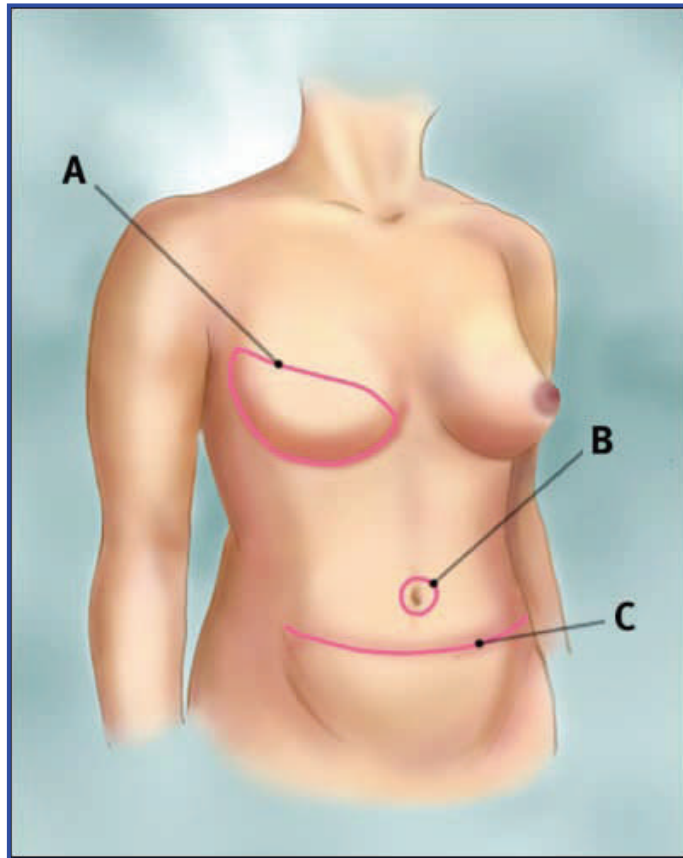
[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.6 Surgical Complications](#)

TRAM Flap Breast Reconstruction - Lines of incisions



Woman with lines of trans-rectus abdominis muscle (TRAM) reconstruction incisions.

A lines of reconstructed breast incisions

B circle of re-positioned "belly button" incision

C line of abdominal surgery incision

Reproduced from: <http://www.breastcancer.org>

[For more breast reconstruction pictures](#)

Related Topics

[5.1 Breast Conservation](#)

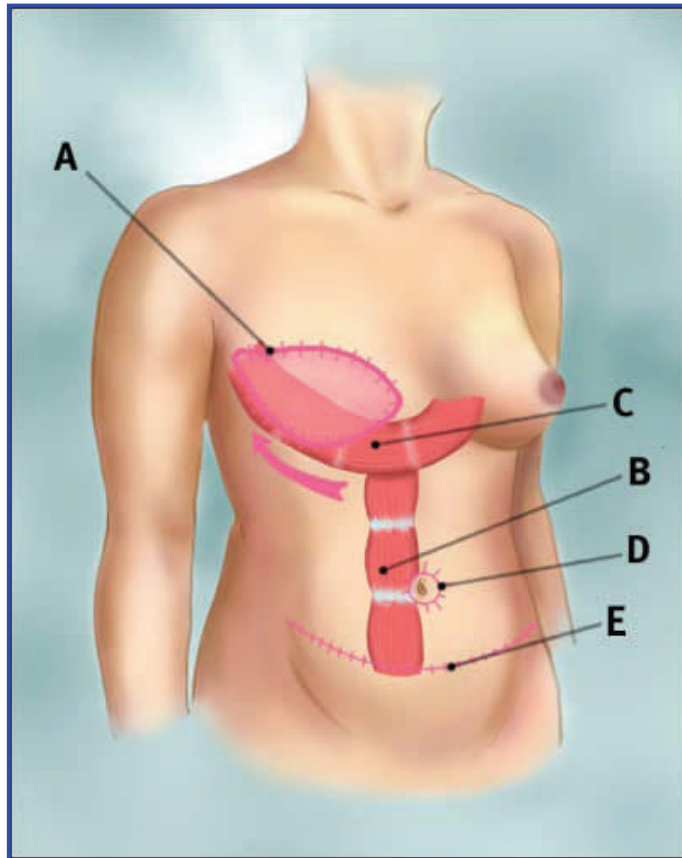
[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.6 Surgical Complications](#)

TRAM Flap Breast Reconstruction - In Process



Woman in process of trans-rectus abdominis muscle (TRAM) reconstruction.

A lines of reconstructed breast incisions

B right trans rectus abdominis muscle

C left TRAM muscle is swung over to re-create the new breast

D incision circle of re-positioned "belly button" incision

E line of abdominal surgery

Reproduced from: <http://www.breastcancer.org>

Related Topics

[5.1 Breast Conservation](#)

[5.2 Sentinel Node Biopsy](#)

[5.3 Mastectomy](#)

[5.4 Axillary Dissection](#)

[5.6 Surgical Complications](#)

Surgical Complications

This section reproduces information from the publication [*The Clinical Practice Guidelines for the Management of Early Breast Cancer*](#). Chapter 4 pp 62—64

Breast surgery requiring general anaesthesia has a low risk of complications. The main risks are:

- Post operative wound infection
- Haematoma
- Deep venous thrombosis

Women who have other unrelated diseases may have increased risk associated with anaesthesia. In appropriate cases, this increased risk should be discussed prior to surgery.

Following **mastectomy and axillary dissection**, a woman may experience:

- Seroma of the axilla (following axillary dissection) or skin flap (See Seroma).
- Pain in the upper medial aspect of the arm and chest wall
- Impact of loss of the breast on body image, appearance and self-esteem;
- Lymphoedema of the arm (following axillary dissection) - which can occur at any stage, even years after treatment (See [the Section Lymphoedema](#)).
- Chest wall discomfort—which should settle within six months.

Following **breast conservation** and subsequent breast irradiation, a woman may experience:

Related Topics

- [5.1 Breast Conservation](#)
- [5.2 Sentinel Node Biopsy](#)
- [5.3 Mastectomy](#)
- [5.4 Axillary Dissection](#)
- [5.5 Breast Reconstruction](#)

Surgical Complications

- Seroma of the axilla (following axillary dissection)
- Breast oedema
- Breast pain and / or chest wall pain—which may last from three months to up to several years in some cases
- Lymphoedema of the arm (following axillary dissection and/or irradiation) which can occur at any stage, even years after treatment (*See the Section [Lymphoedema](#)*).

Following **breast reconstruction**, a woman may experience:

- Partial necrosis (death of tissue) of a soft tissue reconstruction
- Infection and delayed healing
- Infection and rejection of a prosthesis (in prosthetic breast reconstruction)
- A second primary tumour in retained breast tissue
- Weakness of the abdominal wall (where tissue is in the rectus flap method of reconstruction).

Seroma

A seroma is a build-up of normal body fluid that often occurs after armpit (axillary) surgery. Although seromas can be uncomfortable and cause significant swelling, they are not dangerous. A seroma is not a recurrence of cancer, nor is it a long-term swelling of the arm (lymphoedema). Seromas tend to develop over a period of days to weeks and are not emergencies. Some patients (up to 30%) will need to have the fluid from a seroma removed using a syringe and needle. This will often need to be done a few times over a period of days to weeks until the build-up of fluid settles. This procedure is not usually painful as the needle can be placed

Related Topics

- [5.1 Breast Conservation](#)
- [5.2 Sentinel Node Biopsy](#)
- [5.3 Mastectomy](#)
- [5.4 Axillary Dissection](#)
- [5.5 Breast Reconstruction](#)

Surgical Complications

in a numb patch in the skin. After a seroma has been drained once, it is easy to recognise the signs if the fluid collects again.

Occasionally, seromas can discharge by themselves causing a release of blood-stained fluid through the armpit wound. This distressing event is not an emergency. If this occurs, the area should be washed with warm water and a dry dressing applied to the wound.

**Extract from [Wound Care: An information guide for patients](#)
NSW Breast Cancer Institute**

Haematoma

Occasionally, blood collects within the tissues surrounding the wound causing swelling, discomfort and hardness called a haematoma.

The body can take several weeks to reabsorb the blood. If the haematoma causes a lot of discomfort the surgeon may decide to draw off the fluid using a syringe and needle.

Related Topics

- [5.1 Breast Conservation](#)
- [5.2 Sentinel Node Biopsy](#)
- [5.3 Mastectomy](#)
- [5.4 Axillary Dissection](#)
- [5.5 Breast Reconstruction](#)

6. NURSING CARE / FOLLOW UP

6.1 Specialist Breast Nurse

6.2 Physiotherapy

6.3 Physiotherapy Tasmania

The role of the Specialist Breast Nurse

The specialist breast nurse (SBN) coordinates the care of the person diagnosed with breast cancer. It is best if the nurse meets with the patient as early as possible in her progress through the system to make sure her care is coordinated. The SBN liaises with all the different areas that the patient is likely to come in contact with. The nurse is someone that the patient can refer back to, and is there to make sure she has all the relevant information she needs. The SBN can also show her where to find the different literature and resources including support groups and networks.

The SBN role is important because it provides a single point of contact for the person with breast cancer and provides continuity of care from diagnosis on. The SBN can liaise with the screening centre, the surgeon, radiation and medical oncologists, social worker, physiotherapist and the many other health professionals, support and information services the patient may come in contact with.

Further Information:

Tasmanian Specialist Breast Nurse Regional Services currently available at:

North West Regional Hospital	(03) 6430 6599
Hobart Community Nurse Service	(03) 6222 7602
Kings Meadows Community Health Nurse Service	(03) 6336 5109

Breast Care Nurse Breast Cancer Network Australia (BCNA)

Related Topics

[6.2. Physiotherapy](#)

[6.3 Physiotherapy Tasmania](#)

Physiotherapy

Physiotherapy is important for shoulder care after surgery. Women who have been subjected to surgical treatment for breast cancer may develop late sequelae in the area of operation on the chest wall and/or in the ipsilateral arm or shoulder after the immediate surgical discomfort has passed.

[“Physiotherapy can improve the strength, movement and muscle tone in the operated extremity and also reduce the presence and severity of the late symptoms.”](#)

Physiotherapy may be important as prior to the commencement of radiotherapy women will need to have the full range of movement restored to the level it was prior to surgery.

Further Information:

This Resource: [Lymphoedema](#)

Publications:

[Physiotherapy after treatment, Lymphoedema—prevention and treatment](#) NSW Breast Cancer Institute

[Shoulder Care](#)—NSW Breast Cancer Institute

[After breast cancer surgery—looking ahead](#) pp 30—33 Queensland Cancer Fund

Related Topics

[6.1 The Specialist Breast Nurse](#)

[6.2. Physiotherapy](#)

[6.3 Physiotherapy Tasmania](#)

Physiotherapy Tasmania

A woman seeking physiotherapy can either self-refer or seek a referral from her GP unless she comes through the hospital, which can refer her directly.

Women's Health Tasmania has contact details for suitable physiotherapists.

Contacts in Tasmania

Specialist Breast Nurses:

North West Regional Hospital	(03) 6430 6599
Hobart Community Nurse Service	(03) 6222 7602
Kings Meadows Community Health Nurse Service	(03) 6336 5109

Women's Health

North	(03) 6336 2401
North West	(03) 6440 7131
South	(03) 6222 7211

Free call Statewide Women's Health Information Line **1800 675 028**

Further Information:

For further information the woman should talk to her GP, SBN or surgeon.

Related Topics

[6.1 The Specialist Breast Nurse](#)

[6.2. Physiotherapy](#)

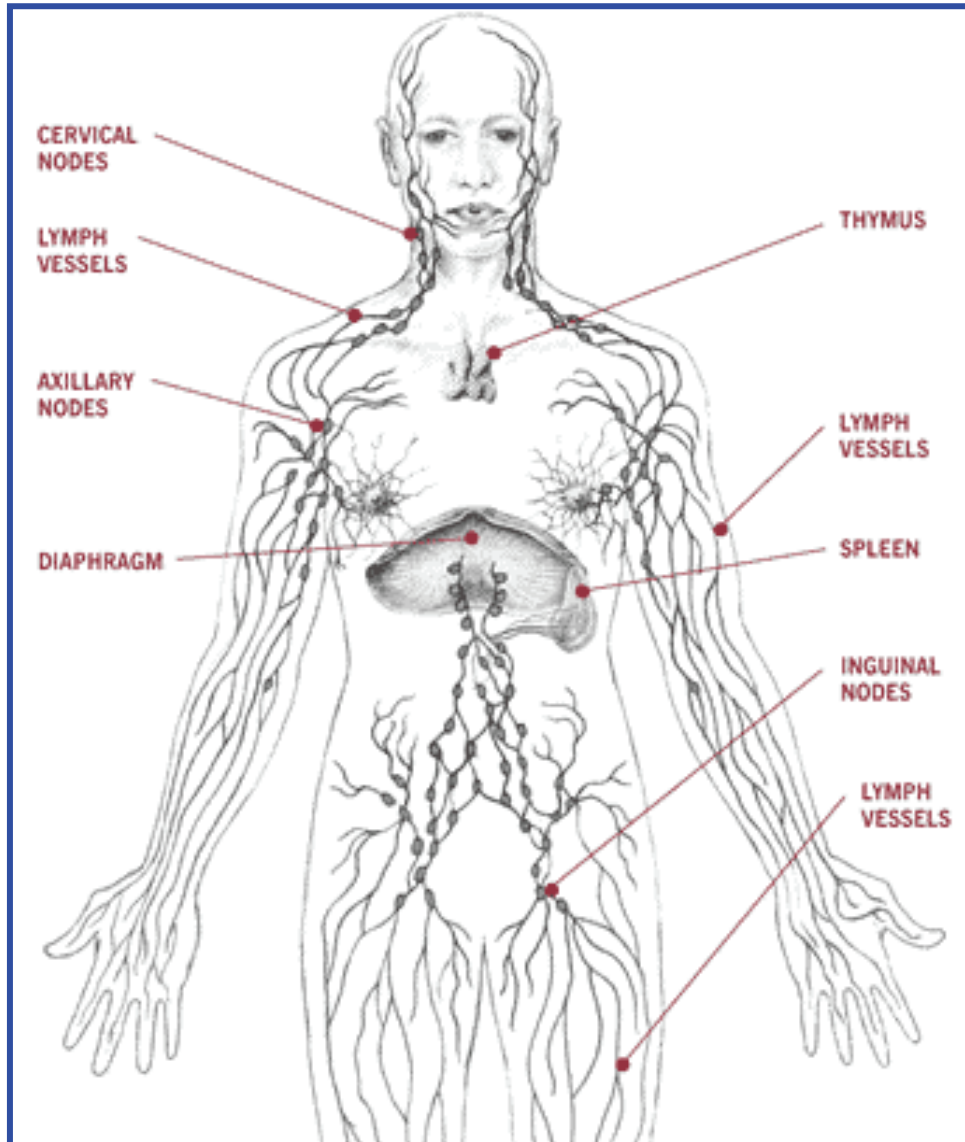
7. LYMPHOEDEMA

7.1 The Lymphatic System

7.2 Lymphoedema; assessment, prevention
and management strategies

7.3 Key Points

The Lymphatic System



Acknowledgements:

Reproduced from www.healingdaily.com

Related Topics

[7.2 Lymphoedema](#)

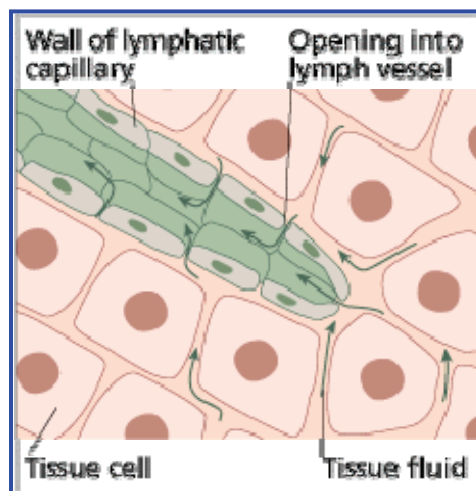
[7.3 Key Points](#)

What is the Lymphatic System?

The lymphatic system is a system of thin tubes that runs throughout the body. These tubes are called 'lymph vessels'. They are also called 'lymphatic vessels'.

The lymphatic system is like the [blood circulation](#) - the tubes branch through all parts of the body like the arteries and veins that carry blood, except that the lymphatic system carries a colourless liquid called 'lymph'.

Lymph is a clear fluid that circulates around the body tissues. It contains a high number of lymphocytes ([white blood cells](#)). [Plasma](#) leaks out of the [capillaries](#) to surround and bathe the body tissues. This then drains into the lymph vessels.



The fluid, now called lymph, then flows through the lymphatic system to the biggest lymph vessel - the thoracic duct. The thoracic duct then empties back into the blood circulation.

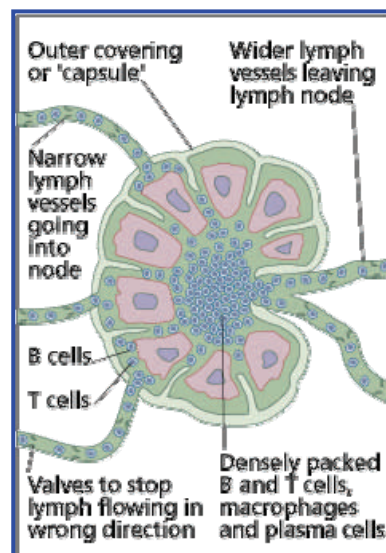
Related Topics

[7.2 Lymphoedema](#)

[7.3 Key Points](#)

Lymph glands

Along the lymph vessels are small bean-shaped lymph glands or 'nodes'. It is usually possible to feel some of the lymph nodes.



There are lymph nodes

- Under each arm, in the armpits
- In each groin (at the top of the legs)
- In the neck

There are also lymph nodes that cannot be felt in

- the abdomen
- the pelvis
- the chest

What does the lymphatic system do?

The lymphatic system does three main jobs in the body. It

- [Drains fluid](#) back into the bloodstream from the tissues
- [Filters lymph](#)
- [Fights infections](#)

Related Topics

[7.2 Lymphoedema](#)

[7.3 Key Points](#)

Draining fluid into the bloodstream

As the blood circulates, fluid leaks out into the body tissues. This fluid is important because it carries food to the cells and waste products back to the bloodstream. The leaked fluid drains into the lymph vessels. It is carried through the lymph vessels to the base of the neck where it is emptied back into the bloodstream. This circulation of fluid through the body is going on all the time.

Filtering lymph

This is the job of the spleen. It filters the lymph to take out all the old worn out red blood cells. These are destroyed and replaced by new red blood cells that have been made in the bone marrow.

Fighting infection

When people say "I'm not well, my glands are up" they are really saying they have swollen lymph nodes because they have an infection. The lymphatic system helps fight infection in many ways such as:

- Helping to make special white blood cells (lymphocytes) that produce antibodies
- Having other blood cells called macrophages inside the lymph nodes which swallow up and kill foreign particles, for example germs.

Acknowledgments:

This information was developed by [CancerHelp UK](#)

Further Information:

Websites:

The [lymphatic system illustration](#) on the previous page

The [Cancer Help UK lymphatic system](#) UK

The [Better Health lymphatic system](#) Victorian Government

Related Topics

[7.2 Lymphoedema](#)

[7.3 Key Points](#)

What is Lymphoedema?

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

- Lymphoedema is a swelling of the arm and hand which may occur immediately or at any time after surgery or radiation therapy.
- Lymph is a normal colourless fluid which forms in the body and drains into the blood through a network of vessels and nodes. Lymph nodes are filter stations which play an important part in the body's defence against infection. Muscle movements help move lymph fluids.
- Most women who have surgery for breast cancer have some lymph nodes under their arm removed. This surgery interferes with the natural flow of lymph.
- If the lymph nodes are removed by surgery or damaged by radiotherapy, fluid can accumulate in the tissues and swelling (oedema) occurs. This is known as lymphoedema. Untreated, this swelling may become difficult to control. Most women have symptoms of swelling, numbness, discomfort and shooting pains in the arm, breast and armpit immediately after surgery. This is not lymphoedema.

Key points:

- Most breast cancer patients do not get lymphoedema.
- Experts believe that removing only the sentinel node (sentinel node biopsy) will reduce the incidence of lymphoedema (at this stage the procedure is only being done as part of a clinical trial).
- Lymphoedema can be managed and prevented/reduced. The earlier lymphoedema is diagnosed and treated, the more successful the results.
- You may wish to take extra care in your daily life to reduce your risk of lymphoedema. This does not mean that you have to stop living a normal active life.

Related Topics

[7.1 The Lymphatic System](#)

[7.3 Key Points](#)

What is Lymphoedema? *cont'd*

Early signs of lymphoedema

The person may experience the following symptoms in the arm on the side of the operation:

- A heavy, tight arm
- Pins and needles in the arm, swelling of the arm or breast or any part of these
- Numbness, temperature changes and aches in the arm and/or shoulder
- Indentations in the skin from tight clothing, wearing a watch or jewellery
- Rings or jewellery which feel tighter than normal
- an appearance of swelling in the arm

What triggers lymphoedema?

Some factors have a much greater probability of causing or increasing lymphoedema than others.

The most important ones are:

Infections in the arm: Perhaps resulting from cuts, injections, insect bites, scratches, burns or sunburn. Keeping skin moisturised and supple reduces the risk of infection. Treat any possible infections promptly with antiseptic. If the arm becomes red or swollen and the person feels unwell, perhaps with flu-like symptoms, they should see their medical practitioner immediately.

Being overweight: Excess weight may slow the lymph flow.

Too little or too much exercise: Gentle muscle movement increases lymph flow and reduces the risk of fluids accumulating. It is better to do gentle regular exercise than occasional bursts of intense exercise. If the person wants to exercise vigorously, they should work up to it and keep an eye on the swelling. Find the exercise routine which suits.

Related Topics

[7.1 The Lymphatic System](#)

[7.3 Key Points](#)

What is Lymphoedema? *cont'd*

Other factors include:

Overheating the arm: Sun, hot baths, spas, saunas, excessive exercise, sprains and bruises - all these cause lymph flow to increase and may overload the lymph vessels.

Travelling: Sitting still on long car or bus trips and pressure variations in planes may reduce lymph flow. There are precautions that can be taken - the person should ask a lymphoedema therapist.

Holding heavy parcels: This can reduce lymph flow. Work up to carrying heavy items and check for swelling.

Constrictions to the upper body or arm: For example, blood pressure cuffs, tourniquets, bras with narrow straps, clothes which are tight around the chest or arm, and tight jewellery or watches may reduce lymph flow.

Related Topics

[7.1 The Lymphatic System](#)

[7.3 Key Points](#)

Lymphoedema: Key Points

Women who have lymphoedema, or who have had both surgery and radiotherapy to the axilla resulting in a high risk of developing lymphoedema, need to look after their arm as the risk of infection is high. Women should be advised that the risk of problems associated with lymphoedema may be decreased by adhering to the following:

- If the arm on the same side as the surgery is cut or infected, or becomes hot, red, or swollen, immediate medical advice should be sought, the area cleaned and oral antibiotics commenced at the earliest sign of infection
- If possible, avoid: having blood taken in the affected arm, blood pressure checked, a drip inserted or injections or vaccinations
- Avoid cuts, burns and insect bites
- Avoid washing the dishes without gloves
- Avoid letting the arm get sunburnt
- Avoid gardening without gloves and long sleeves
- Avoid carrying anything heavy with the affected arm
- Wear loose clothing and loose jewellery
- Use skin cream to keep the skin of the arm moist
- Keep cool during hot weather
- Eat a healthy diet to maintain body weight within reasonable limits

Any intervention in the affected arm should be very carefully considered.

Related Topics

[7.1 The Lymphatic System](#)

[7.2 Lymphoedema](#)

Lymphoedema

Further Information:

[Lymphoedema checklist](#)

Tasmania Lymphoedema Support Group

Ms Jill Wood
42 Stanley St
Bellerive
Hobart TAS 7018
(03) 6244 4634

Tasmanian Lymphoedema Centre Inc

C/- St Mary's Community Health Centre
Gardiners Creek Rd
St Mary's Tasmania 7215
Email: stmarys@tco.asn.au

Websites:

[The Lymphoedema Association of Australia](#)

[Lymphoedema](#) - Breast Cancer Network Australia

[Lymphoedema](#) - NSW Breast Cancer Institute

[Adelaide Lymphoedema Clinic](#)

[Living with Lymphoedema after breast cancer treatment](#) (UK site)

[What is lymphoedema?](#) (UK site)

Related Topics

7.1 The Lymphatic System

8. ADJUVANT THERAPY

8.1 Radiotherapy

8.2 Chemotherapy

8.3 Hormone therapy

8.4 Complementary therapy

8.5 Others

Herceptin

Bisphosphinates

8.6 Clinical Trials

Radiotherapy

Adapted from the National Breast Cancer Centre (NBCC website) :
www.nbcc.org.au

The main aim of radiotherapy is to destroy any breast cancer cells that may be left in:

- your breast (after breast conserving surgery), or
- the breast tissue left on your chest (after mastectomy).

Radiotherapy uses X-rays (controlled doses of radiation) to destroy cancer cells. It is usually given after surgery to the breast. Radiotherapy is a 'localised' treatment, which means it treats only the area of your body it's aimed at. . Occasionally radiotherapy is also used to treat the lymph nodes in the armpit and/or lower neck.

When is radiotherapy considered an option?

- After breast conserving surgery, radiotherapy to the breast is recommended.
- Sometimes after mastectomy: radiotherapy to the chest is recommended.
- Occasionally, after either type of breast surgery: radiotherapy to the lymph nodes in the armpit and/or lower neck is occasionally recommended.

After breast conserving surgery

After breast conserving surgery, radiotherapy can mean:

- less risk of the breast cancer coming back in the same breast.
- less risk of needing further surgery.
- increased likelihood of surviving breast cancer .

Related Topics

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Radiotherapy *cont'd*

After mastectomy

It is not very common to have radiotherapy to the chest wall after a mastectomy, but sometimes women have radiotherapy if they are considered to be at higher risk of the breast cancer coming back in the breast tissue on their chest.

Further Information:

[Breast cancer therapy: treatment in addition to surgery](#) - The Cancer Council Tasmania

[Radiotherapy for early breast cancer](#) - NSW Breast Cancer institute

[DCIS Breast Cancer: Radiotherapy can reduce recurrence risk](#)
MyDr Australia

[About breast cancer radiotherapy](#) - Cancer Help UK

[Breast cancer radiotherapy side effects](#) - Cancer Help UK

Publications:

Radiotherapy - Chapter 5 pp 67—75 *Clinical Practice Guidelines
Management of Early Breast Cancer*

[Understanding radiotherapy](#) - The Cancer Council Tasmania

Related Topics

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Radiotherapy *cont'd*

Title: Radiotherapy

Publisher: National Breast Cancer Centre (NBCC)

Description: Radiotherapy treatment for breast cancer. The main aim of radiotherapy is to destroy any breast cancer cells that may be left in: your breast (after breast conserving surgery) or the breast tissue left on your chest (after mastectomy).
Date: Oct 2003

Title: Treatment options for metastatic breast cancer

Publisher: National Breast Cancer Centre (NBCC)

Description: If you have been diagnosed with metastatic breast cancer you will usually be recommended to have one or more general anti-cancer treatments. You may also be recommended to have one or more specific treatments.

Date: Jun 2004

Title: Skin care during radiotherapy

Publisher: National Breast Cancer Centre (NBCC)

Description: Skin care during radiotherapy treatment for breast cancer. The following information aims to help you understand what skin reactions you can expect during radiotherapy and how you can limit these reactions.

Date: May 2004

Title: Lymphoedema

Publisher: National Breast Cancer Centre (NBCC)

Description: Lymphoedema is a swelling of the arm and hand which may occur immediately or at any time after surgery or radiation therapy.

Date: Mar 2004

Title: Side effects

Publisher: National Breast Cancer Centre (NBCC)

Description: Side effects of radiotherapy treatment for breast cancer. Describes common and less common side effects of radiotherapy.

Date: Oct 2003

Title: Breast conserving treatment

Publisher: National Breast Cancer Centre (NBCC)

Description: Breast conserving surgery plus radiotherapy is as effective as mastectomy for most women with early breast cancer. What does breast conserving surgery usually involve? What are the advantages of breast conserving surgery? What does breast conserving surgery look like?

Date: Oct 2003

Related Topics

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Radiotherapy *cont'd*

Title: What's involved

Publisher: National Breast Cancer Centre (NBCC)

Description: What's involved in radiotherapy for breast cancer.

Date: Oct 2003

Title: After the operation

Publisher: National Breast Cancer Centre (NBCC)

Description: After the operation for breast cancer and what to expect. Recovering your health: an action plan. This action plan covers patients who have had radiation treatment following surgery for breast cancer.

Date: Oct 2003

Title: A systematic review of intraoperative radiotherapy in early stage breast cancer - October 2002

Publisher: Australian Safety and Efficacy Register of New Interventional Procedures - Surgical (ASERNIP-S)

Description: Intraoperative radiotherapy (IORT) in early stage breast cancer refers to the use of radiotherapy during breast conserving surgery. ASERNIP-S has reviewed the available published evidence to compare the safety and effectiveness of this new procedure with conventional breast conserving surgery with postoperative radiotherapy (BCT), in which radiotherapy is administered after the operation has been completed.

Date: Oct 2002

Title: Consumer summary: Intraoperative radiotherapy in early stage breast cancer

Publisher: Australian Safety and Efficacy Register of New Interventional Procedures - Surgical (ASERNIP-S)

Description: Intraoperative radiotherapy (IORT) in early stage breast cancer refers to the use of radiotherapy during breast conserving surgery. ASERNIP-S has reviewed the available published evidence to compare the safety and effectiveness of this new procedure with conventional breast conserving surgery with postoperative radiotherapy (BCT).

Date: Aug 2002

Related Topics

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Radiotherapy *cont'd*

Title: Consumer summary: Intraoperative radiotherapy in early stage breast cancer

Publisher: Australian Safety and Efficacy Register of New Interventional Procedures - Surgical (ASERNIP-S)

Description: Intraoperative radiotherapy (IORT) in early stage breast cancer refers to the use of radiotherapy during breast conserving surgery. ASERNIP-S has reviewed the available published evidence to compare the safety and effectiveness of this new procedure with conventional breast conserving surgery with postoperative radiotherapy (BCT).

Date: Aug 2002

Title: Clinical practice guidelines for the management of advanced breast cancer

Publisher: National Health and Medical Research Council (NHMRC)

Description: These Guidelines have been developed by a multidisciplinary working party, and are primarily intended for use by all health professionals involved in the management of women with advanced breast cancer. They aim to provide material that will be helpful and supportive to those managing the difficult range of problems that may present.

Date: Jan 2001

Title: Psychosocial clinical practice guidelines: information, support and counselling for women with breast cancer

Publisher: National Health and Medical Research Council (NHMRC)

Description: These Guidelines provide clear recommendations on the most effective ways of treating anxiety or mood disorders associated with the diagnosis of breast cancer, including the most appropriate interventions to minimise the distress for women in the early stages of breast cancer.

Date: Jan 2000

Related Topics

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Chemotherapy

Adapted from the National Breast Cancer Centre (NBCC website):
www.nbcc.org.au

Chemotherapy is the use of drugs to kill cancer cells. Cells grow by dividing. Chemotherapy works by damaging cancer cells that are dividing. It travels around the body in the blood stream, attacking cells.

The cells most affected by chemotherapy are those which divide rapidly. This means that both cancer cells and normal cells are affected. However, normal cells are able to renew themselves quickly. Cancer cells recover more slowly and with more difficulty. The rest periods between chemotherapy treatments allow the normal cells to recover. However, as the cancer cells do not recover, more are killed with each treatment.

Key Points

- Chemotherapy can be used on its own or in combination with surgery or radiotherapy depending on what type of cancer it is.
- Chemotherapy is given by mouth using tablets or by injection - most commonly into a vein through the use of an intravenous drip treatment in cycles usually lasting for several weeks or months. There is a period of rest before the next treatment.
- Usually before each treatment blood tests are taken to measure the levels of different types of cells in the blood. Blood is made up of white cells (which fight infection), red cells (these carry oxygen from the lungs around the body) and platelets (these help the blood to clot).
- If the blood cell levels are too low, the time between treatments may be lengthened to allow the body to get stronger or the drugs may be changed.

Related Topics

[8.1 Radiotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Chemotherapy Side effects

Adapted from the National Breast Cancer Centre (NBCC website) :
www.nbcc.org.au

Research has shown that more than 50% of cancer patients receiving chemotherapy have some side effects (see below). Different drugs affect individual women differently. Each woman may experience fewer or more side effects with a particular drug than another woman on the same drug. It's possible to have chemotherapy with very few side effects. If this happens, it means that this person is fortunate – it does not mean that the chemotherapy isn't working. If the person experiences side effects, even if they don't appear serious, it's important they discuss them with their doctor.

Most side effects of chemotherapy can be managed with medical care.

Common side effects of chemotherapy

These side effects are more common than others, but a person is unlikely to develop many or all of them:

- nausea and vomiting
- fatigue
- hair loss
- diarrhoea
- constipation
- weight gain
- weight loss
- depression
- anxiety
- menopausal symptoms (temporary or permanent)

Related Topics

[8.1 Radiotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Chemotherapy Side effects *cont'd*

- sexual difficulties
- mouth ulcers
- skin problems

Less common side effects of chemotherapy

- feeling vague
- nerve and muscle problems (with taxane drugs only)

Rare side effects of chemotherapy

Although rare, the following side effects can be serious, and a doctor should be consulted as soon as possible if they develop:

- infection due to a low level of white blood cells
- bleeding or bruising
- kidney or bladder problems
- heart problems (with anthracycline drugs only)
- bone marrow problems
- allergic reactions

Keeping a diary with details of side effects (such as what they are, when they happen, how long they last for) might help the person to discuss them with their doctor.

Their doctor should be promptly told of any side effects from chemotherapy.

Treatment can be given to improve symptoms, or the chemotherapy can be adjusted if necessary.

Related Topics

[8.1 Radiotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Chemotherapy Side effects *cont'd*

Further Information:

Systemic Adjuvant Therapy—Ch 6 pp 77-96 Clinical Practice Guidelines Management of Early Breast Cancer

[Breast cancer therapy: treatment in addition to surgery](#)—Cancer Council Tasmania

[Understanding chemotherapy](#)—Cancer Council Tasmania

[Adjuvant chemotherapy for breast cancer](#)—NSW Breast Cancer Institute

[About breast cancer chemotherapy](#)—(UK Site)

Publications:

Title: Media release. PBAC recommendation to list Herceptin on the PBS

Publisher: *Australian Government Department of Health and Ageing*

Description: The Pharmaceutical Benefits Advisory Committee has recommended that the Australian Government subsidise, under the Pharmaceutical Benefits Scheme (PBS), the drug, trastuzumab (Herceptin), for the treatment of patients with HER2 positive early stage breast cancer following surgery. Certain conditions apply.

Date: Jul 2006

Related Topics

[8.1 Radiotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Chemotherapy *cont'd*

Title: Antineoplastic antibodies - clinical applications

Publisher: *Australian Prescriber*

Description: Trastuzumab and rituximab are genetically engineered antibodies which are now available for the treatment of metastatic breast cancer and non-Hodgkin's lymphoma respectively.

Date: Dec 2003

Title: Cancer antibodies (Comment for consumers)

Publisher: *Australian Prescriber*

Description:

To reduce side effects, new treatments are needed which will kill the cancer cells but not damage normal cells. One approach is to make antibodies against the cancer cells.

Date: Dec 2003

Title: Side effects

Publisher: *National Breast Cancer Centre (NBCC)*

Description: Side effects of chemotherapy treatment for breast cancer. Research has shown that more than 50% of cancer patients receiving chemotherapy have some side effects ranging from nausea, tiredness and hair loss to concern about family members, depression and dread of treatment.

Date: Oct 2003

Title: What's involved

Publisher: *National Breast Cancer Centre (NBCC)*

Description: What's involved in chemotherapy treatment for breast cancer.

Date: Oct 2003

Title: Chemotherapy

Publisher: *National Breast Cancer Centre (NBCC)*

Description: Chemotherapy treatment for breast cancer. Chemotherapy is the use of drugs to kill cancer cells. Cells grow by dividing. Chemotherapy works by damaging cancer cells that are dividing. It travels around the body in the blood stream attacking cells.

Date: Oct 2003

Related Topics

[8.1 Radiotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Hormone Therapy

Adapted from the National Breast Cancer Centre (NBCC website) :
www.nbcc.org.au

Hormonal therapies include:

- anti-estrogens (for example, tamoxifen)
- ovarian treatments (called ovarian ablation)
- aromatase inhibitors (newer drugs that are being researched).

Hormonal therapies may be used in addition to surgery and radiotherapy for treating breast cancer. Hormonal therapies can also be used in addition to chemotherapy.

The aim of hormonal therapies is to:

- destroy any cancer cells that could be left in the breast after surgery and/or radiotherapy
- destroy any cancer cells that might have spread outside the breast and armpit, but cannot be detected
- reduce the risk of a new breast cancer developing in either breast.

Hormonal therapies are called systemic treatments because they work on the whole body to control cancer. Systemic treatments aim to destroy any cancer cells that could have spread outside the breast or armpit area but cannot be detected.

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Hormone Therapy—What's involved

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

How do hormonal therapies work?

The growth of some breast cancers is affected by estrogen, one of the female hormones in the body. In breast cancer, most hormonal therapies work by decreasing the amount of estrogen in the body or by stopping the cancer cells from getting estrogen. If the cancer cells have hormone receptors on them, hormonal therapies can help destroy any remaining cancer cells, and help prevent the cancer from returning.

Who can benefit from hormonal therapies?

Hormonal therapies are usually recommended for women who have hormone receptors on their cancer cells. Breast tissue removed during breast surgery is sent to a pathologist for tests. The aim of one of these tests is to see whether the cancer cells have hormone receptors on them, including estrogen receptors (ER) and/or progesterone receptors (PR). This information is included in the pathology report.

If the breast cancer cells have estrogen receptors on them, they are said to be estrogen-receptor positive. If the breast cancer cells do not have estrogen receptors on them, they are said to be estrogen receptor negative.

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Hormone Therapy—What's involved *cont'd*

What are the different types of hormonal therapies?

Anti-estrogens

Anti-estrogens work by stopping cancer cells from getting estrogen. The most commonly used anti-estrogen is tamoxifen. **Tamoxifen** is taken as a tablet once a day, usually for 5 years. Studies are currently being conducted to find out whether women would benefit from taking anti-estrogens for longer than 5 years. Other anti-estrogens are being developed, but have not yet been fully re-searched. Anti-estrogens can be used by women of all ages who have hormone receptors on their cancer cells.

Ovarian treatments

Ovarian treatments (called ovarian ablation) work by stopping the ovaries from producing estrogen.

Ovarian treatments include:

- radiotherapy to the ovaries
- surgery to remove the ovaries
- injection of drugs (called luteinising hormone-releasing hormone (LHRH) analogues, such as goserelin) under the skin on the abdomen (stomach).

Ovarian treatments are usually recommended for women who have not yet reached menopause and who have hormone receptors on their cancer cells.

When are the different hormonal therapies recommended?

Whether or not the woman has reached menopause can affect the type of hormonal therapy that may be recommended. The woman and her doctors should consider whether hormonal therapy is an option, and if so, which therapies are most appropriate for her particular situation.

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Hormone Therapy *cont'd*

Further Information:

[Breast cancer therapy: treatment in addition to surgery](#) - The Cancer Council Tasmania

[Breast cancer and oestrogen](#) - VIC government

[Types of breast cancer hormone therapy](#) (Cancerhelp - UK site)

[Hormone therapy for breast cancer](#) - (Cancerhelp—UK site)

Publications:

Title: Breast cancer and oestrogen
Publisher: Better Health Channel
Description: Around 60 per cent of breast cancers are sensitive to the female sex hormone oestrogen. The growth of these cancers can be minimised by taking drugs that block the action of oestrogen in the breast tissue.
Date: Oct 2005

Title: New hope for advanced breast cancer
Publisher: myDr
Description: A study has brought some good news to postmenopausal women with advanced breast cancer. **Date:** Jul 2001

Title: Side effects
Publisher: National Breast Cancer Centre (NBCC)
Description: Side effects of hormone therapy treatment for breast cancer - anti-estrogens (eg tamoxifen) ovarian treatments (called ovarian ablation) aromatase inhibitors (newer drugs that are being researched).
Date: Aug 2004

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Hormone Therapy *cont'd*

Title: Hormone therapy
Publisher: National Breast Cancer Centre (NBCC)
Description: Hormone therapy treatment for breast cancer - anti-estrogens (eg. tamoxifen) ovarian treatments (called ovarian ablation) aromatase inhibitors (newer drugs that are being researched).
Date: Aug 2004

Title: Clinical practice guidelines for the management of advanced breast cancer
Publisher: National Health and Medical Research Council (NHMRC)
Description: These guidelines have been developed by a multidisciplinary working party, and are primarily intended for use by all health professionals involved in the management of women with advanced breast cancer. They aim to provide material that will be helpful and supportive to those managing the difficult range of problems that may present.
Date: Jan 2001

Title: Psychosocial clinical practice guidelines: information, support and counselling for women with breast cancer
Publisher: National Health and Medical Research Council (NHMRC)
Description: These Guidelines provide clear recommendations on the most effective ways of treating anxiety or mood disorders associated with the diagnosis of breast cancer, including the most appropriate interventions to minimise the distress for women in the early stages of breast cancer.
Date: Jan 2000

Related Topics

- [8.1 Radiotherapy](#)
- [8.2 Chemotherapy](#)
- [8.4 Complementary Therapy](#)
- [8.5 Others](#)
- [8.6 Clinical Trials](#)

[Alternative and Complementary Therapies](#) - National Breast Cancer Centre

Further Information:

[Alternative and complimentary therapies](#)—Cancer Council Tasmania

[Complementary and Alternative therapies in Ireland](#)—(Irish site)

[Complementary therapies and breast cancer](#)—(UK site)

Publications:

Title: Complementary treatments

Publisher: *National Breast Cancer Centre (NBCC)*

Description: Complementary and alternative therapies are any treatments or therapies that are not part of the conventional treatment (such as surgery and radiotherapy) of a disease. **Date:** Oct 2003

Title: Non-medical treatments

Publisher: *National Breast Cancer Centre (NBCC)*

Description: Briefly describes non-medical treatments for pain management in cancer, including: relaxation; education programs about how to take pain medication; acupuncture and massage. **Date:** Aug 2004

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.5 Others](#)

[8.6 Clinical Trials](#)

Other Treatments:

Herceptin

[About Herceptin](#)—Medicare Australia

[Herceptin](#)

[Trastuzumab \(Herceptin ®\)](#) - Cancerbackup UK information site

Bisphosphonates

These are drugs to make weak bones stronger and less likely to break and treat the pain caused by some bone cancers. ([The Cancer Council Victoria](#)).

[Breast cancer, bones and bisphosphonates](#)—NSW Breast Cancer Institute

[Controlling side effects—Hypercalcaemia](#)—National Breast Cancer Centre

[Treatment options](#) —National Breast Cancer Centre

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.6 Clinical Trials](#)

Clinical Trials

The following is reproduced from the publication:

[Clinical Practice Guidelines for the Management of Advanced Breast Cancer](#) Ch 3.5 pp42—43

Improvements in the management of women with advanced breast cancer come from evidence gained from clinical trials. As far as possible, these guidelines are based on such evidence, but many questions remain unanswered. It is important that women with advanced breast cancer be offered the chance to participate in clinical trials suitable to their particular situation. It is estimated that less than five per cent of women with breast cancer participate in clinical trials.

Clinical trials usually involve the testing of new treatments, or of new indications for treatments established for other indications. The development of a new treatment involves progression through three phases of clinical trials:

- Phase 1 trials are designed to evaluate the relationship between doses and toxicity, and aim to establish a tolerable schedule of administration. They usually include only small numbers of patients who have already received the standard treatments for their condition.
- Phase II trials are designed to screen new treatments for their anti-tumour effects, in order to identify those worthy of further evaluation. In phase II trials, a series of patients with particular types of cancer receive the new treatment to determine the proportion in whom the tumours shrink. If the proportion of patients responding compares favourably with other available treatments, then the usefulness of the treatment in patient management is assessed in a phase III trial.

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

Clinical trials *cont'd*

new treatment or the best available standard treatment. Ideally the two arms of treatment should be indistinguishable, so if possible an inactive placebo is used to mask the standard treatment arm. This is rarely possible in trials of chemotherapy drugs, because of their side effects. Phase III trials often include large numbers of patients from many hospitals. They may be conducted through national and international collaborations, for example under the auspices of the Australia and New Zealand Breast Cancer Trials Group or the International Breast Cancer Study Group.

In Australia clinical trials must be approved by an Institutional Ethics Committee (which might be known as an Institutional Review Board or a Research and Ethics Committee). Women must be provided with relevant and complete information about the trial protocol and provide their written consent before they take part. Entry into a trial must be entirely voluntary and refusal to enter a trial or a decision to withdraw later without giving a reason must not affect the woman's relationship with her treating practitioner.

At all times, medical practitioners must treat the woman in her best interests. This means she should only be offered participation in a clinical trial if the best available evidence suggests that the treatments being tested are likely to be at least as effective as the best standard treatment. It also means that if during a trial the treatment appears to be detrimental, she must be withdrawn from the trial and offered alternative treatment appropriate to her condition at the time.

An individual woman may benefit from taking part in a clinical trial. Indirect

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

Clinical trials *cont'd*

evidence suggests that patients who participate in clinical trials have better outcomes than similar patients given similar treatment outside the context of a trial (Level III). This may be due to patient selection, closer monitoring and supervision, earlier identification and treatment of complications or better compliance.

Participation in clinical trials gives the woman access to new treatments before they become generally available. Many women are pleased with the prospect of improving knowledge about their disease and treatment.

There are a number of issues relevant to women participating in clinical trials, that may need to be addressed at the time that requests for participation are made.

Women need to know:

- That the trial will be conducted properly:
- That the trial will give useful results:
- That their refusal to participate in a trial will not compromise their treatment:
- That their doctor is not putting his or her own research interest before patient care:
- Enough information to be able to give informed consent to participate or refuse to participate:
- How to decide whether or not to participate at a time when they are adjusting to the diagnosis or new development and considering treatment options:
- The costs and benefits to themselves of taking part in the trial; and
- What will happen during the course of the trial.

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

Clinical trials *cont'd*

Guideline	Level	Reference
There is indirect evidence that women who participate in clinical trials have better outcomes than similar women given similar treatment outside trials. It is appropriate for clinicians to discuss participation in clinical trials with women.	III	130-132

Further Information:

[Should women take part in clinical trials in breast cancer? The issues and some solutions](#)—National Breast Cancer Centre

[NHMRC Clinical Trials Centre](#)—National Health Medical Research Centre

[Clinical Trials](#) Breast Cancer institute of Australia

[Clinical Trials](#)—Cancer Council Victoria

[Australia New Zealand Breast Cancer Trials Group \(ANZBCTG\)](#)

[Clinical trials](#)—National Breast Cancer Centre

Publications:

Title: Clinical trials

Publisher: *National Breast Cancer Centre (NBCC)*

Description: Clinical trials of hormone therapy treatment for breast cancer - anti-estrogens (eg tamoxifen) ovarian treatments (called ovarian ablation) aromatase inhibitors (newer drugs that are being researched).

Date: Aug 2004

Related Topics

[8.1 Radiotherapy](#)

[8.2 Chemotherapy](#)

[8.3 Hormone Therapy](#)

[8.4 Complementary Therapy](#)

[8.5 Others](#)

9. PSYCHOSOCIAL CARE

Psychosocial Care

Each patient diagnosed with breast cancer will experience a range of practical, psychological and emotional challenges as a result of their diagnosis and the adverse effects of treatment. Each person's life may be further disrupted by changes in role and family functioning, occupational or employment status, and financial status. Some patients will have to come to terms with progressive illness and approaching death, others may be faced with the physical, emotional and social challenges of survival.

The psychosocial impact of cancer is significant. The prevalence of long-term psychological distress in patients with cancer has not been extensively researched but available estimates range from 20% to 66%. While most people with cancer experience symptoms of anxiety, evidence suggests that 12% - 30% experience clinically significant anxiety problems.

Studies of patients with breast cancer and with various other cancer types also show that those who have undergone chemotherapy, adjuvant therapy or radiation therapy are at increased risk for depression. Some studies report clinical depression in up to 40% of patients with cancer with progressive disease in palliative care.

The experience of cancer may continue to have an emotional impact on some people long after their initial diagnosis. Residual concerns about recurrence and fear of checkups may last for many years after the original diagnosis. The diagnosis of a recurrence causes significant stress. It is estimated that recurrence is associated with psychiatric disorders in up to 50% of women with breast cancer.

Related Topics

Psychosocial Care

The previous section was adapted from the publication:

Clinical practice guidelines for the psychosocial care of adults with cancer
Ch 1 pp 1 - 2

Support for patients with cancer

It is usual for most women diagnosed with breast cancer to experience sadness and loss during their illness and treatment. Responses can include episodes of intense and distressing emotions such as anger, fear and helplessness and feeling out of control.

Each patient will draw on their own individual coping resources that have helped in the past. Health workers can assist in strengthening the patient's own resources by providing additional emotional, informational and practical assistance.

For example, some women may feel as if they have little or no control over their disease or its treatment. This may lead to feelings of powerlessness and resentment. Providing information about breast cancer and available treatments and having the opportunity to discuss the management of their disease with their health team assists in enabling the women actively engage in her own care, gain control and assist in her ability to cope.

When to intervene

After the diagnosis of breast cancer, most women do not experience long-term emotional distress. Also, women who have good support mechanisms and perceive they are experiencing good support have decreased psychological

Related Topics

Psychosocial Care

morbidity.

Often psychological distress may present as anxiety and / or depression.

Depression is commonly under diagnosed and under treated. Nurses and health care workers in regular contact with the breast cancer patient are well placed to recognise that the diagnosis is causing psychological distress severe enough to need intervention. This can be done by referring the patient to appropriate support agencies for counselling and psychotherapy.

For 20—30% of women, the disruption to their life style through loss of roles, functional abilities, and problems with relationships (both existing and new) may be experienced. Other issues may relate to self concept, body image and sexuality.

Factors which may increase a woman's risk of psychological morbidity are:

- Younger age
- Single, separated, divorced, widowed
- Living alone
- Having children less than 21 years of age
- Economic adversity
- Poor marital functioning
- Past treatment for psychological illness especially depression
- Cumulative stressful life events
- History of alcohol or other substance abuse
- Disease / treatment factors
- Experiencing the side effects of treatment

Related Topics

Psychosocial Care *cont'd*

Anxiety

Anxiety can affect a person's whole being. Psychologically and on a behavioural level it can affect their capacity to express themselves or to deal with everyday situations. Anxiety results from an individual's internal response to a vague, distant or unrecognised danger. Psychologically anxiety can manifest in a variety of ways:

- Shortness of breath
- Heart palpitations
- Trembling or shaking
- Sweating
- Choking
- Nausea or abdominal distress
- Numbness
- Dizziness or unsteadiness
- Feelings of detachment or of being out of touch with oneself
- Hot flashes or chills
- Fear of dying
- Fear of going crazy or out of control.

Depression

Depression may be present where some of the following symptoms have been present for at least two weeks:

- Depressed mood most of the day, nearly every day
- Diminished interest or pleasure in almost all activities of the day, nearly

Related Topics

Psychosocial Care *cont'd*

every day.

- Significant weight gain or loss when not dieting, and decreased appetite every day.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive inappropriate guilt nearly every day
- Diminished ability to think, concentrate, or make decisions nearly every day
- Recurrent thoughts of death or recurrent suicidal thoughts with a specific plan; or a suicide attempt; of a specific plan for committing suicide

Referral

If you are concerned about the person's psychological wellbeing it is important to refer them to their general practitioner, psychologist, social worker or a trained counsellor. Discussing a referral with your patient for psychosocial support is important, as often women may refuse assistance related to shame or guilt that they are not coping. Coping with feelings of shock, disbelief and denial can make it difficult for your patient to talk about deeply personal and intimate matters. If this has been their communication pattern in the past, they may find it difficult to communicate. Where appropriate,

- Discuss your concerns with your patient about their distress
- Encourage them to talk about their feelings
- Encourage the patient to talk with their clinician/s

If your patient is presenting with suicidal thoughts or has informed you that she has a specific plan for committing suicide, it is imperative that you contact her general practitioner for further assistance.

Related Topics

Psychosocial Care *cont'd*

Your relationship with the breast cancer patient can greatly assist them in their journey along the treatment pathways.

Psychological therapies

Psychological therapies usually involve exploring what breast cancer means for the women and can include problem solving, cognitive techniques to cope with the distress of the breast cancer and relaxation training.

Assistance

Depending on your professional relationship with the patient, there are a range of options that can assist with psychosocial care:

General Practitioners

The patient should be encouraged to see their GP.

Social Workers

All hospitals and many community health centres have social workers available.

Psychologists

Medicare now offers limited assistance to access psychologists. The program is limited to 12 sessions per calendar year and the patient must be referred by a GP, psychiatrist or paediatrician. For further information go to:

[Psychologists on Medicare](#)

Related Topics

Psychosocial Care *cont'd*

[Clinical practice guidelines for the psychosocial care of adults with cancer](#) - Summary Guide

[The identification of psychological distress in women with breast cancer](#) - National Breast Cancer Centre

[Psychosocial impact on the areas of body image and sexuality for women with breast cancer](#) - National Breast Cancer Centre

[Experience of diagnosis. Information and support needs of women diagnosed with ductal carcinoma in situ DCIS](#) - National Breast Cancer Centre

[Feelings and fears](#) - National Breast Cancer Centre

Related Topics

10. YOUNGER WOMEN

Younger Women

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

Breast cancer can affect women at any age. In Australia, over 11,300 cases of breast cancer are diagnosed each year. Of these about 680(6%) are in women younger than 40 years and around 2000 (18%) are in women aged between 40 and 49 years.

Younger women with breast cancer have specific issues, because the type of treatment they receive may impact on them in a number of ways including:

- Pregnancy
- Fertility
- Early menopause

Further Information:

[Young women with breast cancer](#)—Breast Cancer Network Australia

[Young Women's Working Party](#)—Breast Cancer Network Australia

Websites:

[Young Women Online](#)—NSW Cancer Council website

Related Topics

Younger Women *cont'd*

Publications:

[Clinical practice guidelines for the management and support of younger women with breast cancer.](#) National Breast Cancer Centre

Menopausal symptoms—Ch 7.2 p31 Clinical Practice Guidelines for the management and support of younger women with breast cancer

Fertility—Ch 7.3 p32-33 Clinical Practice Guidelines for the management and support of younger women with breast cancer

Pregnancy—Ch 7.3 p33-36 Clinical Practice Guidelines for the management and support of younger women with breast cancer

[Menopause](#)—NSW Breast Cancer Institute

Related Topics

11. CARE OF THE PATIENT WITH METASTATIC DISEASE

11.1 Impact of Advanced Breast Cancer

11.2 Physical Effects of Disease Progression

11.3 Management of Symptoms

11.4 Interventions to Improve Quality of Life

11.5 Management of Pain

The Impact of Advanced Breast Cancer

The following includes extracts from Chapter 2 [*The Clinical Practice Guidelines for the Management of Advanced Breast Cancer*](#) pp21-24

It is generally accepted that cancer impacts on several important areas of a person's life:

- Physical
- Psychological
- Social
- Sexual and
- Spiritual and existential matters

(Please also refer to the NHMRC NBCC [*Psychosocial clinical practice guidelines providing information, support and counselling for women with breast cancer 2000*](#))

The focus of management should be the minimisation of the physical and psychosocial impact of the cancer and its treatment. This is especially important in the case of metastatic disease. Clinicians need to be aware of the potential impact of the disease on women's quality of life, and have in place strategies for monitoring this so that appropriate interventions can be implemented. Quality of life has been shown to be a significant, independent prognostic predictor of survival in clinical trials (Level III). Quality of life assessment is also important because changes in sequential assessments may influence the choice of continued observation or the introduction of active treatment.

Identification of those at risk of adverse psychosocial outcome and its early detection and treatment is a crucial step in enhancing the quality of life of women with advanced breast cancer. (p 21)

Related Topics

[11.2 Physical Effects of Disease Progression](#)

[11.3 Management of Symptoms](#)

[11.4 Interventions to Improve Quality of Life](#)

[11.5 Management of Pain](#)

The Impact of Advanced Breast Cancer *cont'd*

Physical issues

Advanced breast cancer can often take the form of a chronic illness.

Adverse symptoms can include loss of function and curtailment of activity.

Women with advanced breast cancer rank general health items such as self-care, mobility, physical activity, appetite and sleep in the upper quartile of importance (Level IV).

Psychological issues

A number of studies have indicated that 25—50 per cent of women show clinically significant levels of anxiety and depression when a diagnosis of recurrence of breast cancer is made (Level III). One study indicated that 21 per cent of women with advanced breast cancer attending a clinic had significant levels of anxiety (as measured by the Hospital Anxiety and Depression Scale), compared with 14 per cent of women without breast cancer in a matched control group

Studies also indicate that 50—75 per cent of women rate the diagnosis of recurrence more devastating than the original diagnosis. The diagnosis of recurrences challenges women to confront their mortality more than any other stage of the cancer illness (Level III). (p 22). [*The Clinical Practice Guidelines for the Management of Advanced Breast Cancer*](#) pp21-24

Related Topics

[11.2 Physical Effects of Disease Progression](#)

[11.3 Management of Symptoms](#)

[11.4 Interventions to Improve Quality of Life](#)

[11.5 Management of Pain](#)

The Impact of Advanced Breast Cancer *cont'd*

Social Issues

The effect of illness on the quality of relationships with family and friends is consistently ranked as a major concern for women with advanced disease. (p 23)

Sexual issues

This area has not been extensively researched and limited information is available. Treatment may have a profound impact on sexual function because of its' side effects. (p 23)

Please see also [Clinical practice guidelines for the management and support of younger women with breast cancer](#)

Key points	Level	Reference
Many if not most women rate the diagnosis of recurrence as more devastating than the original diagnosis	IV	47
Quality of life is a significant, independent, prognostic predictor of survival in clinical trials	III	27, 33
Advanced breast cancer and its treatment can both have a significant impact on quality of life	II	62

Related Topics

[11.2 Physical Effects of Disease Progression](#)

[11.3 Management of Symptoms](#)

[11.4 Interventions to Improve Quality of Life](#)

[11.5 Management of Pain](#)

Physical Effects of Disease Progression

Disease progression will depend on

- Where the cancer is located, its extent and
- The type of treatment and the patient's response to treatment.

Breast cancer most commonly spreads to one or more of the following sites:

- Bones
- Liver
- Brains
- Lungs and / or the pleura

Bone cancer

Symptoms of this cancer may include

Bone pain due to:

- Cancer pressing on the bone
- Cancer in the bone pressing on nerves
- A fracture of the bone
- Spinal cord compression
- Hypercalcaemia

Secondary cancer of the lungs or pleura

Symptoms of this cancer may include:

- Shortness of breath
- Dry cough
- Fatigue
- Chest pain
- A feeling of heaviness in the chest

Related Topics

[11.1 Impact of Advanced Breast Cancer](#)

[11.3 Management of Symptoms](#)

[11.4 Interventions to Improve Quality of Life](#)

[11.5 Management of Pain](#)

Physical Effects of Disease Progression

Secondary cancer of the Liver

Symptoms of this cancer may include:

- Weight loss
- Lack of appetite
- Fatigue
- Discomfort or pain on the right side of the abdomen
- Nausea
- Jaundice
- Swelling of the abdomen

Secondary cancer of the brain

- Symptoms of this cancer may include:
- Headaches
- Nausea and vomiting
- Weakness in an arm or leg, or unsteadiness in walking
- Change in vision
- Seizures
- Confusion or disorientation or personality changes (rare)

Side effects of treatment

What are the side effects of hormonal therapies? - see pp 48—51 [*A Guide for women with Metastatic breast cancer*](#)

This resource [**Hormone Therapy**](#)

What are the side effects of chemotherapy? [*A Guide for women with Metastatic breast cancer*](#) pp 58 –68

This resource [**Chemotherapy**](#)

What are the side effects of Radiotherapy? [*A Guide for women with Metastatic breast cancer*](#) pp 76—77

This resource [**Radiotherapy**](#)

Related Topics

[11.1 Impact of Advanced Breast Cancer](#)

[11.3 Management of Symptoms](#)

[11.4 Interventions to Improve Quality of Life](#)

[11.5 Management of Pain](#)

Management of Symptoms

The following is reproduced from the publication:

[Clinical Practice Guidelines for the Management of Metastatic Breast Cancer](#) Chapter 9 pp 107

Symptoms in women with advanced breast cancer are multifactorial, caused directly or indirectly by the underlying tumour, its complications or treatment. Non-cancer related causes should not be forgotten. In an Australian sample of cancer patients receiving chemotherapy in 1993 (45 per cent for breast cancer) an average of 20 symptoms were reported. 13 of which were physical and seven psychosocial. More than 50 percent reported experiencing nausea, tiredness, hair loss, concern about family members, depression, anxiety and dread of treatment. (p 107).

Related Topics

- [11.1 Impact of Advanced Breast Cancer](#)
- [11.2 Physical Effects of Disease Progression](#)
- [11.4 Interventions to Improve Quality of Life](#)
- [11.5 Management of Pain](#)

Interventions to Improve Quality of Life

The following is reproduced from the publication:

[Clinical Practice Guidelines for the Management of Metastatic Breast Cancer](#) Chapter 8 pp 103—106

Physical interventions

Anything that reduces distress from symptoms has the potential to improve quality of life, so long as the benefits outweigh the side effects.

Key point	Level	Reference
Baseline and serial quality of life measures independently predict survival	III	27, 33

Guideline	Level	Reference
Although chemotherapy may have significant side effects, it can improve the quality of life and should therefore be considered	II	27, 229

Psychosocial interventions

Key point	Level	Reference
Psychosocial Interventions in women with advanced breast cancer improve quality of life	II	49, 348

Related Topics

- [11.1 Impact of Advanced Breast Cancer](#)
- [11.2 Physical Effects of Disease Progression](#)
- [11.3 Management of Symptoms](#)
- [11.5 Management of Pain](#)

Interventions to Improve Quality of Life *cont'd****Psychosocial interventions***

Guidelines	Level	Reference
Psychosocial support alleviates anxiety and depression, improves coping, and improves physical and functional adjustment.	I	76, 136
Relaxation therapy eases cancer pain	I	136
Education programs improve pain control	II	352
Supportive group counselling improves 10-year survival	II	348,349
Group therapy increases self-esteem and reduces anxiety, depression and anger	II	350
Education sessions for women newly diagnosed with advanced breast cancer improve adjustment, knowledge, death awareness and self concept.	III	351

Related Topics

- [11.1 Impact of Advanced Breast Cancer](#)
- [11.2 Physical Effects of Disease Progression](#)
- [11.3 Management of Symptoms](#)
- [11.5 Management of Pain](#)

Management of Pain

The following is reproduced from the publication:

[Clinical Practice Guidelines for the Management of Metastatic Breast Cancer](#) Chapter 10 p 113

Health professionals need to acknowledge the psychosocial, cultural and spiritual influences on pain perception, including fears that pain may be uncontrollable, that it is inevitable, that it will continue, and that it will get worse. Fear of analgesics, particularly opioids, may contribute to a patient's reluctance to report cancer pain.

Pain needs to be accurately assessed and diagnosed, as not all pains are due to cancer. While acknowledging the subjective nature of the pain experience, measurement of pain with a visual analogue scale or a numerical rating scale (0-10) assists in objectifying the intensity of pain.

Related Topics

- [11.1 Impact of Advanced Breast Cancer](#)
- [11.2 Physical Effects of Disease Progression](#)
- [11.3 Management of Symptoms](#)
- [11.4 Interventions to Improve Quality of Life](#)

Management of Pain *cont'd*

Guidelines	Level	Reference
Oral analgesics are the mainstay of pain relief in patients with cancer. Strong opioids are safe and effective for moderate to severe pain	I	359
Analgesia should be taken regularly at prescribed times, rather than on an as-needed (prn) basis. Prn analgesics for chronic pain should be reserved for breakthrough pain only	IV	360
Radiotherapy plays a major role in the management of acute cancer pain	I	301
The regular use of laxatives should be considered in conjunction with the administration of analgesics, preferably before constipation develops	IV	364
Bisphosphonates have a role in the treatment and prevention of bone pain in breast cancer	I	358
Non-steroidal anti-inflammatory drugs (NSAIDs) have a role in the treatment of inflammatory bone pain.	II	369
Epidural, intrathecal and intracerebroventricular opioids are often effective in treating acute pain that is not controlled with conventional treatment.	I	363

Related Topics

- [11.1 Impact of Advanced Breast Cancer](#)
- [11.2 Physical Effects of Disease Progression](#)
- [11.3 Management of Symptoms](#)
- [11.4 Interventions to Improve Quality of Life](#)

Metastatic Breast Cancer

Further Information:

[The management of the woman with metastatic breast cancer—](#)
a guide for GPs National Breast Cancer Centre

[A guide for women with Metastatic breast cancer](#)—National
Breast Cancer Centre

[Secondary or metastatic breast cancer](#)—Breast Cancer Network
Australia

[Explaining secondary breast cancer](#)—Breast Cancer Network
Australia

[Overcoming cancer pain: a guide for people with cancer, their
families and friends](#)— Cancer Council Tasmania

[About Herceptin](#)©—Medicare Australia

Please note at time of publication Herceptin© had just been listed on the Pharmaceutical Benefits Scheme (PBS).

Publications:

[When cancer won't go away: for people whose cancer has ad-
vanced](#)—Cancer Council Tasmania

[When cancer won't go away: for carers of people whose cancer
has advanced](#) Cancer Council Tasmania

Title: Personal stories living with breast cancer

Publisher: *National Breast Cancer Centre (NBCC)*

Description: This section includes personal accounts from women men and fami-
lies affected by a diagnosis of breast cancer. If you are interested in contributing to
this section please let us know. **Date:** May 2004

Related Topics

- [11.1 Impact of Advanced Breast Cancer](#)
- [11.2 Physical Effects of Disease Progression](#)
- [11.3 Management of Symptoms](#)
- [11.4 Interventions to Improve Quality of Life](#)
- [11.5 Management of Pain](#)

Metastatic Breast Cancer *cont'd*

Title: Metastatic breast cancer

Publisher: *National Breast Cancer Centre (NBCC)*

Description: Every woman's cancer is different and the way the cancer develops will be different for each woman. For some women living with a diagnosis of metastatic breast cancer is similar to living with a chronic illness. **Date:** Feb 2004

Title: Barbara's story

Publisher: *Better Health Channel*

Description: A personal account. Barbara was diagnosed with breast cancer at the age of 45. After the shock of her initial diagnosis she decided not to give in to depression, but to fight her disease. **Date:** Dec 2003

Title: Living with breast cancer

Publisher: *National Breast Cancer Centre (NBCC)*

Description: The diagnosis and treatment of breast cancer causes changes in your life and can change how you think and feel about things. These changes and their effects will not be the same for all women

Date: Oct 2003

Title: Information for partners of women with breast cancer

Publisher: *National Breast Cancer Centre (NBCC)*

Description: When the woman you love has breast cancer written from a males perspective **Date:** Oct 2003

Title: Feelings and fears living with breast cancer

Publisher: *National Breast Cancer Centre (NBCC)*

Description: Sharing your thoughts and feelings with others even painful feelings can help you cope with your diagnosis. **Date:** Oct 2003

Title: Breast cancer: just words, not a sentence

Publisher: *myDr*

Description: Read Valerie's story, a real-life account of living with breast cancer. **Date:** May 2001

[NSW Breast Cancer Institute publications](#)

Related Topics

- [11.1 Impact of Advanced Breast Cancer](#)
- [11.2 Physical Effects of Disease Progression](#)
- [11.3 Management of Symptoms](#)
- [11.4 Interventions to Improve Quality of Life](#)
- [11.5 Management of Pain](#)

12. PALLIATIVE CARE

12.1 Palliative Care

12.2 Tasmanian Palliative Care

12.3 End of Life Issues

12.4 Key Points

Palliative Care

The following is adapted from the publication:

[Clinical practice guidelines for the psychosocial care of adults with cancer](#)
Ch 3 pp 65-66

The movement from curative to palliative treatment represents a crucial step for patients with cancer and their treatment team. In considering palliative care for patients with advanced cancer, it is important to distinguish between the palliative approach (where active treatments may still have an important role to play and focuses on both the level of comfort and the level of function), palliative care (that may include the involvement of specialised palliative service providers for patient and carer assessment, support and advice), and terminal care (where the patient is in the final stages of life). The distinction is important not only in care planning, but in establishing the goals for treatment. Discussion with the patient and family is crucial at this time.

A key aspect of the successful transition is ensuring that both the health care team and the patient recognise that palliative care does not preclude active treatments to improve symptom control and enhance quality of life. For many patients with cancer the transition from curative treatment to palliative is gradual. Where active treatment continues to be offered, its goal changes from cure to control of disease and, subsequently, to the control of symptoms.

As unnecessary delays in referral to specialist palliative services can lead to increased suffering for the patient, it is important for the palliative care team to be introduced as soon as required and that this team is seen as an integral

Related Topics

[12.2 Tasmanian Palliative Care](#)

[12.3 End of Life Issues](#)

[12.4 Key Points](#)

Palliative Care cont'd

component of the cancer services.

Managing the transition to palliative care can be one of the most difficult communication tasks ever faced by cancer health professionals. It is important to make clear to the patient that this transition does not imply discontinuation of active care or abandonment from their treating cancer team.

Specialist palliative care teams are interdisciplinary teams consisting of palliative care medical specialists, specialist nurses and social workers.

The following is adapted from the publication:

[Clinical Practice Guidelines for the Management of Advanced Breast Cancer](#) Chapter 3.7 p47

The palliative approach is the application of good symptom control in association with particular attention to the psychological, social, cultural, emotional and spiritual wellbeing of the person and her family / carers.

It is expected that all women with advanced breast cancer will be offered the

Guidelines	Level	Reference	pal-
Specialist palliative care services improve the outcomes in relation to patient satisfaction, patients being cared for in their place of choice, family satisfaction, and control of pain, symptoms and family anxiety.	I	164	

liative approach, and that some will take up the offer of palliative care. p 47

Related Topics

[12.2 Tasmanian Palliative Care](#)

[12.3 End of Life Issues](#)

[12.4 Key Points](#)

The Tasmanian Palliative Care Service

offers many different forms of assistance:

Comprehensive assessment of the person seeking palliative care, including pain and symptom management, psychological, emotional, social and spiritual support.

Practical support including equipment, information to other services and liaison between health professionals.

Out of hours medical and nursing advice, information and support to clients who are registered with the service.

Bereavement support and counselling with support groups held from time to time

Education for families, professionals and community groups.

Trained volunteers to assist people through respite, practical help, transport and companionship.

Palliative care is provided in many settings—private homes, in hospitals, in nursing homes and in special palliative care units. Wherever possible the choice is made by the client receiving care.

Fast Facts

- The Tasmania Palliative Care Service has community teams around the state who work in both urban and rural areas.
- The Service has dedicated inpatient facilities for palliative care patients in Hobart and Launceston.
- The Service aims to maximise quality of life emphasising support and comfort rather than cure.

Related Topics

[12.1 Palliative Care](#)

[12.3 End of Life Issues](#)

[12.4 Key Points](#)

The Tasmanian Palliative Care Service

Booking Information:

South 6224 2515

North 6336 5544

North West 6440 7111

Further Information:

Standards for Providing Quality Palliative Care for all Australians

This publication can be ordered from

Palliative Care Australia

PO Box 24

Deakin West ACT 2600

Tel: **(02) 6232 4433**

Email: pcainc@pallcare.org.au

Therapeutic Guidelines—Palliative Care

[Clinical practice guidelines for the psychosocial care of adults with cancer](#) Ch 3 pp 65-66

Palliative Care Services—Tasmanian Government

The Tasmanian Palliative Care Service

National Palliative Care Strategy—Australian government

Palliative Care Australia

A guide for women with metastatic breast cancer.—NBCC

Related Topics

[12.1 Palliative Care](#)

[12.3 End of Life Issues](#)

[12.4 Key Points](#)

Palliative Care

Publications:

A list of [Healthinsite](#) resources on palliative or terminal care, euthanasia, 'dying with dignity' and hospice care are listed below.

[CareSearch](#) is an electronic resource for palliative care with options to search the literature on palliative care and support research and practice.

Title: CareSearch

Publisher: *Flinders University*

Description: An electronic resource for palliative care researchers, educators and clinicians providing care for people with a life limiting illness. Provides literature databases, research data management system and evidence based palliative care resources. **Date:** Aug 2006

Title: Palliative care - help for the terminally ill

Publisher: *Better Health Channel*

Description: Palliative care helps people who are terminally ill to achieve the best quality of life possible. It offers support and grief counselling to the family caring for the person with a terminal illness. Palliative care is provided in the patient's home, in hospital or in special units called hospices.

Date: Jul 2006

Title: Palliative care - help for the terminally ill

Publisher: *Better Health Channel*

Description: Palliative care helps people who are terminally ill to achieve the best quality of life possible. It offers support and grief counselling to the family caring for the person with a terminal illness. Palliative care is provided in the patient's home, in hospital or in special units called hospices.

Date: Jul 2006

Title: End of Life

Publisher: *HealthInsite Life Events Page*

Description: Links to information on issues related to death and dying.

Date: Jul 2006

Related Topics

[12.2 Tasmanian Palliative Care](#)

[12.3 End of Life Issues](#)

[12.4 Key Points](#)

Palliative Care *cont'd*

- Title:** Media release. New Medicare items for Indigenous health, refugees and palliative care
Publisher: *Australian Government Department of Health and Ageing*
Description: Medicare funded health checks for Aboriginal and Torres Strait Islander children and for refugee and other humanitarian entrants will be listed on the Medicare Benefits Schedule (MBS) from May 1. A new item recognising the role of specialists in pain and palliative medicine, and items covering immunisation and wound-management by registered Aboriginal Health Workers in the Northern Territory on behalf of a GP will also be listed.
Date: May 2006
- Title:** Overview of National Palliative Care Program initiatives
Publisher: *Australian Government Department of Health and Ageing*
Description: This document provides information on the national projects funded and managed by the Australian Government Department of Health and Ageing through the National Palliative Care Program.
Date: Apr 2006
- Title:** Palliative Care
Publisher: *Australian Government Department of Health and Ageing*
Description: Palliative care - quality of life for people with a life-limiting illness, their families and carers.
Date: Jan 2006
- Title:** Book review - Compassionate cities : public health and end-of-life care
Publisher: *Consumers' Health Forum of Australia (CHF)*
Description: This article contains a review of a book that explores end-of-life health care issues.
Date: Jan 2006
- Title:** Advanced care planning : rights and responsibilities
Publisher: *Consumers' Health Forum of Australia (CHF)*
Description: Advanced Care Planning (ACP) allows patients to record their wishes for treatment they would, or would not want if, at some future time, they are not longer competent.
Date: Jan 2006
- Title:** What is palliative care?
Publisher: *Australian Government Department of Health and Ageing*
Description: A description of what is meant by the term palliative care, when and where it is provided and by whom.
Date: May 2005

Related Topics

[12.2 Tasmanian Palliative Care](#)

[12.3 End of Life Issues](#)

[12.4 Key Points](#)

Palliative Care *cont'd*

Title: Palliative care explained

Publisher: *Better Health Channel*

Description: Palliative care helps people with a life threatening illness maximise their quality of life. It also offers support to family and friends during the illness and with bereavement counselling. It is provided wherever the person prefers - their home, a specialist hospice unit or other health facility. **Date:** Nov 2005

Title: When cancer won't go away: for carers of people whose cancer has advanced

Publisher: *The Cancer Council Victoria*

Description: Information for carers of people with advanced cancer.

Date: May 2005

Title: The National Palliative Care Program

Publisher: *Australian Government Department of Health and Ageing*

Description: This page provides a background to the establishment of the National Palliative Care Program **Date:** Feb 2005

Related Topics

[12.2 Tasmanian Palliative Care](#)

[12.3 End of Life Issues](#)

[12.4 Key Points](#)

End of Life Issues

The following is adapted from the publication:

[Clinical practice guidelines for the psychosocial care of adults with cancer](#)
Ch 3 pp 80—85

Maintaining quality of life and minimising the physical and psychosocial impact of the cancer and its treatment should be a major focus of the management of people with cancer, as these have been shown to be a significant, independent prognostic predictors of survival in clinical trials... Health professionals need to be aware of the potential impact of the disease on quality of life for patients and their families and set up monitoring strategies so that appropriate interventions can be implemented. Valid and reliable quality of life assessment is also important as it may influence decision-making about the type of treatments used.

Chapter 19 of [A guide for women with Metastatic breast cancer](#) discusses issues including:

- Unfinished business with family and friends
- Spiritual or religious comfort
- Ways to cope with the 'no more cancer treatment' decision
- Fears you may have about the process of dying
- The practical aspects of preparing for death
-

The practical considerations include

- Preparing a Will or advanced care directive
- Naming a power of attorney
- Enduring guardian

Related Topics

[12.1 Palliative Care](#)

[12.2 Tasmanian Palliative Care](#)

[12.4 Key Points](#)

End of Life Issues

Key points

If pain and other symptoms are not actively treated or controlled, psychological distress increases and physical and social functioning decreases (Level IV)

Pain can be controlled by guided imagery, relaxation therapy, music (Level I) and educational programs aimed at enhancing pain control (Level II)

Education sessions can improve adjustment, knowledge, death awareness and increase positive self concept (Level III-2)

Psychological interventions are associated with improved outcomes in a number of domains of quality of life, including mood, self-esteem, coping, sense of personal control, physical and functional adjustment (Level I) (Level II).

Open communication and expression of feelings promotes adjustment (Level II), (Level III-I).

One of the features associated with a 'good death' (i.e. from the patients perspective) is the social life of the dying patient.

Families and carers benefit from support and counselling (Level IV).

Specialist palliative care services improve patient outcomes in relation to patient satisfaction, the proportion of patients being cared for in their place of choice, family satisfaction, control of pain, symptoms and family anxiety (Level I).

Responding to patients who are dying and their families, may engender considerable distress. It is helpful for health professionals to draw on the expertise of members of a multidisciplinary team, particularly in dealing with complex clinical problems (Level IV).

Having an opportunity to express grief is important in promoting adjustment. **pp 80—81**

Related Topics

[12.1 Palliative Care](#)

[12.2 Tasmanian Palliative Care](#)

[12.3 End of Life Issues](#)

13. TARGETTED RESOURCES

13.1 Aboriginal

13.2 Culturally and Linguistically Diverse

13.3 Lesbian

13.4 Rural

13.5 Men

Aboriginal Women and Breast Cancer

Resources in this area of breast cancer care are under developed. There are no online breast cancer resources in Tasmania that specifically target aboriginal women. There is some material available from other States.

Information:

Aboriginal women and breast cancer

[Aboriginal women](#) National Breast Cancer Centre

[Aboriginal and Torres Strait Islander Women—Improving Care](#)
Breast Cancer Network Australia

[Overcoming Barriers to Screening of Cervical and Breast Cancer in Indigenous Women](#) Rural Health Education Foundation

[Healthy Aboriginal Women—In Mind, Body and Spirit](#) Queensland Government

Aboriginal health

[Australian Indigenous Health](#) Edith Cowan University

Aboriginal health worker resources

[Aboriginal & Islander Health Worker Journal](#)

[Aboriginal Health](#)—Medicine Australia

Related Topics

[13.2 Culturally and Linguistically Diverse](#)

[13.3 Lesbian](#)

[13.4 Rural](#)

[13.5 Men](#)

Aboriginal Women and Breast Cancer

[Aboriginal & Torres Strait Islander rural health workforce](#)

Aboriginal Centre

[Tasmanian Aboriginal Centre](#)

Government Departments

Office for Aboriginal and Torres Strait Islander Health ([OATSIH](#))
[Tasmanian Office](#)

[Aboriginal & Torres Strait Islander rural health workforce](#)

Related Topics

[13.2 Culturally and Linguistically Diverse](#)

[13.3 Lesbian](#)

[13.4 Rural](#)

[13.5 Men](#)

Culturally and Linguistically Diverse (CALD) women and breast cancer

Resources in this area of breast cancer care are limited. There are online breast cancer resources published by the National Breast Cancer Centre that target cultural and linguistically diverse women available in a range of languages and different States have a selection of material available.

Information:

[Breast Cancer: Bridging the cultural divide](#) National Breast Cancer Centre media release

[Information in other languages](#) National Breast Cancer Centre
(scroll to the bottom of the page)

[Exploring cultural attitudes to breast cancer NHMRC](#) National Breast Cancer Centre

Related Topics

[13.1 Aboriginal / TSI](#)

[13.3 Lesbian](#)

[13.4 Rural](#)

[13.5 Men](#)

Lesbians and Breast Cancer

The Breast Cancer Network Australia has done some research on useful internet sites and other resources for lesbians with breast cancer. For further information click on the link [Resources for lesbians with breast cancer](#).

This section reproduces information from the publication [The Clinical Practice Guidelines for the Psychosocial Care of Adults with Cancer](#). Ch 5.4 pp 120 –123

In general, homosexuals (gay men and lesbian women) and heterosexuals have similar health risks and concerns. However, homosexuals may be faced with some issues and concerns not experienced by their heterosexual counterparts.

It should be noted that there is a paucity of high-quality research about the health issues related to sexual orientation and the impact of cancer on those who are homosexual. Most of the literature consists of reports, review articles and descriptive studies. There is however considerable research about HIV/AIDS that appears relevant. Studies report high levels of illness concerns, social isolation, and lack of support in the homosexual population which are associated with psychological distress, anxiety and depression.

The health issues related to sexual orientation

Difficulties experienced by homosexuals

Individuals who identify themselves as homosexual often experience discrimination, violence and social isolation, all of which impact on health and wellbeing. In this population there are higher rates of depression, suicide,

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.4 Rural](#)

[13.5 Men](#)

Lesbians and Breast Cancer

substance abuse/alcoholism, cardiovascular disease and certain cancers than in the heterosexual population. For some homosexuals the stress of cancer can be a reminder of earlier stresses, resurgence of stigmatisation and self doubt affecting sense of identity and well being.

Attitudes of health professionals

Homosexuals may encounter homophobic attitudes and heterosexist assumptions when accessing health services. This may result in discrimination, and can be compounded if health professionals lack sensitivity and/or have limited knowledge of homosexual health issues and are therefore unable to answer questions about health risks. These factors may lead to avoidance or delay in seeking care and follow-up treatment, and be associated with the individual changing practitioners frequently. Individuals may not receive appropriate interventions, education, or information if they have fewer health checks and less screening and consequently may experience reduced quality of medical care.

Findings from primarily descriptive studies suggest that lesbians may be at higher risk of cervical, breast and ovarian cancer (Level IV). Studies have shown that lesbians have less frequent screening for cervical cancer. (Level IV). In one study of 100 lesbians a quarter of the women indicated they had not had a pap smear within the last 3 years including 7.6% who had never had a pap smear (Level IV). There is an incorrect assumption among both women and some health professionals that lesbians do not need routine pap smears because of their sexual orientation,. However they may be

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.4 Rural](#)

[13.5 Men](#)

Lesbians and Breast Cancer

at risk for human papilloma virus, one of the major causes of cervical cancer, through contact with women who may have had previous male partners. Lesbians may be at increased risk of breast and ovarian cancer due to lower use of oral contraceptives, and lower likelihood of having children or breast feeding, however breast screening and breast self-examination appears to be less frequent in this population.

Impact of cancer on homosexual individuals

A descriptive study exploring the impact of breast cancer on lesbian and heterosexual women identified no significant difference in psychological outcomes in relation to mood, sexual activity or relationship issues. Lesbians experienced fewer problems with body image, being more comfortable showing their bodies to others both prior to and following breast cancer. Lesbians were more likely to obtain social support from their partners and friends while heterosexuals received more support from relatives. Lesbians were less satisfied with their physician's care and the inclusion of their partner in medical treatment decisions.

General interactional skills to improve care

An individual's sexual orientation can affect levels of comfort with treatment interventions, ability to obtain emotional support and coping, and communication with health care providers. Non disclosure of sexual orientation is common due to fear that negative responses will lead to reduced standards of care.

Health professionals can improve health seeking behaviours and provide more effective care and improved interaction with lesbians by:

- Providing an environment in which patients feel safe and are encouraged to

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.4 Rural](#)

[13.5 Men](#)

Lesbians and Breast Cancer

discuss their sexual orientation

- Recognising the barriers to care that may have been previously experienced
- Adopting an inclusive approach
- Being supportive and no-judgemental
- Maintaining a non-homophobic attitude
- Distinguishing sexual behaviour from sexual identity
- Maintaining awareness that personal attitudes may affect clinical judgement
- Communicating with gender neutral terms

Further information:

The Clinical Practice Guidelines for the Psychosocial Care of Adults with Cancer. Ch 5.4 pp 120 –123

Other Resources:

[Gay and Lesbian Counselling and Community Services of Australia](#)

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.4 Rural](#)

[13.5 Men](#)

Rural and remote women

This section reproduces information from the publication [*The Clinical Practice Guidelines for the Management of Early Breast Cancer*](#). Ch 8.1 pp103—104

About 30 per cent of Australian women who develop breast cancer live in regional, rural or remote areas. Women living in regional towns generally have access to a range of services. However, women living far from urban centres sometimes have difficult choices. They must undertake treatment locally or travel far from family and friends. In a recent study, rural women with breast cancer in Australia reported spending an average of six weeks away from home. Many of these women would prefer to be treated in their local or regional area, rather than having to travel to a metropolitan centre. The cost of opting for local treatment is that choices may be limited. Most women, apart from those in remote areas, will have reasonable access to a surgeon who can operate on the primary cancer, remove it and stage the disease.

Increasingly, some general surgeons in rural areas have undertaken the considerable effort required to develop a special interest in breast cancer surgery. All surgeons who elect to manage women with breast cancer should keep themselves and their colleagues up to date with the current knowledge and treatment of all aspects of the disease, including current clinical trials. An audit of patient treatments and outcomes should also be maintained.

Particularly in rural and remote areas, GPs play a key role in the initial diag-

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.3 Lesbian](#)

[13.5 Men](#)

Rural and remote women

of women with breast cancer. They also have an ongoing and important role in palliative care where that proves necessary.

With the exception of a few major towns, radiotherapy is not available outside capital cities, and resident medical oncologists are not usually available. Given that radiotherapy usually requires six weeks away from home, this influences some women to opt for mastectomy instead of breast conservation plus radiotherapy. This decision is often made for pragmatic, financial, work, family and social reasons.

Rural/regional surgeons managing breast cancer need a close liaison or networking with appropriate medical oncologists, radiation oncologists and a 'breast surgeon' in a metropolitan breast unit. Preferably these should be doctors who either visit their region or have a specific interest or expertise in breast cancer management for rural women. For most rural women this should facilitate effective and efficient multidisciplinary assessment and management. The oncologist's recommended systemic adjuvant therapy can usually be administered locally and should not require travel.

Women travelling for treatment benefit from being accompanied by a carer who can provide support during their time away. The costs of travel to a regional or urban centre are financial hardship social dislocation and emotional strain. Women who have treatment away from home may also find that communication between their local doctors and the treating specialists is not adequate.

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.3 Lesbian](#)

[13.5 Men](#)

Rural and remote women *cont'd*

Out-of-pocket expenses for women in rural and remote areas

A recent report examined out-of-pocket expenses incurred by women for diagnosis and treatment of breast cancer in Australia. It found that compared with their urban counterparts, women residing in non-urban, rural and remote areas do not appear to incur substantially greater out-of-pocket expenses for medical services involved in screening, diagnosing and treating breast cancer in their region. However, the evidence does suggest that many such women travel to urban or metropolitan areas in order to receive these services and therefore incur additional travel and accommodation costs.

Although most states have a travel and accommodation scheme, in current practice many women do not receive the financial assistance to which they are entitled. The treatment team should assist women to access adequate financial support. It should be noted that there appear to be substantial differences in the patient travel and accommodation schemes run by the state and territory governments.

Further information:

See *this Resource* Section on [Practical and Financial](#)

Rural and remote women with breast cancer

The Breast Cancer Network of Australia has developed a web page dealing with issues specifically relating to women who live in rural or remote parts of Australia. For further information click on the link [Rural and remote women with breast cancer](#)

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.3 Lesbian](#)

[13.5 Men](#)

Rural and remote women *cont'd*

[Breast cancer in rural Australia](#)—Medical Journal of Australia

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.3 Lesbian](#)

[13.5 Men](#)

Men and Breast Cancer

Further information:

Breast cancer in men —National Breast Cancer Centre

Do men get breast cancer? —National Breast Cancer Centre

What causes breast cancer in men? —National Breast Cancer Centre

Signs and symptoms —National Breast Cancer Centre

Men with breast cancer—Breast Cancer Network Australia

Related Topics

[13.1 Aboriginal / TSI](#)

[13.2 Culturally and Linguistically Diverse](#)

[13.3 Lesbian](#)

[13.4 Rural](#)

14. PRACTICAL RESOURCES

14.1 Travel and Accommodation

14.2 Practical and Financial

Prostheses

Wigs and Hats

14.3 The Cancer Council Tasmania

14.4 My Journey Kit

14.5 Local Information

Travel and Accommodation Assistance

If a patient has to travel long distances from their home to the treatment centre, they may be eligible for travel assistance.

Call the [Cancer Helpline](#) 13 11 20 for information about the travel assistance scheme in Tasmania.

In Tasmania volunteers are available to help country patients travelling to treatment .

If the patient needs **help paying for accommodation** while they are receiving cancer treatment, they should first contact the social worker at the hospital where they are receiving or will receive treatment. He or she will be able to advise the patient of financial assistance and other services available.

Call the [Cancer Helpline](#) 13 11 20 for information about affordable accommodation and assistance schemes.

Further Information:

Patient Travel and Assistance Scheme

North west	6440 7073 / 6421 7997
South	6222 8225
North	6348 7249

Referral to be filled in by treating doctor - blue form
13 cents / kilometre for travel; eligibility requirements apply

Related Topics

[14.2 Practical and Financial](#)

[14.3 TCCT](#)

[14.4 My Journey Kit](#)

[14.5 Local Information](#)

Practical and Financial

[The Cancer Council Tasmania](#) has excellent information on :

Practical support

Aspects of cancer and cancer treatment can make it more difficult to manage day-to-day living.

Having cancer and cancer treatment does not necessarily mean that the person must stay in hospital or move in with family or friends. There are services available to help them live in their own home.

For information about **home nursing** services, the person should contact the hospital where they received their medical treatment. Some hospitals have home nursing services for former inpatients; others will refer the person to home nursing services in their area.

Financial support

A cancer diagnosis and treatment creates an added financial burden and may result in temporary or ongoing financial difficulty.

It may be difficult for a person to talk about their financial situation, but it is important that their needs are discussed with the staff at the treatment centre or with their General Practitioner.

Government agencies, The Cancer Council Tasmania and other organisations offer financial assistance programs to help people affected by cancer.

Related Topics

[14.1 Travel and Accommodation](#)

[14.3 TCCT](#)

[14.4 My Journey Kit](#)

[14.5 Local Information](#)

Practical and Financial *cont'd*

- There are benefits available from the [Department of Family and Community Services](#) to assist with financial and practical concerns.
- Information about **Sickness Allowance** can be obtained by calling [Centrelink](#) on 13 27 17.
- For advice about **Childcare Benefits** call the [Family Assistance Office](#) on 13 61 50.
- The Cancer Council Tasmania also offers **no interest loans and welfare grants** to those effected by cancer. It provides practical help for people undergoing cancer treatment burdened by the cost of their care. The scheme is able to pay bills such as hydro, telephone, rates, repairs and rent (to name a few).

To find out about financial support which might be available to you and your family call the [Cancer Helpline](#) 13 11 20.

Related Topics

[14.1 Travel and Accommodation](#)

[14.3 TCCT](#)

[14.4 My Journey Kit](#)

[14.5 Local Information](#)

Prostheses

Statewide Breast Prosthesis Scheme

13 11 20

- Financial assistance for obtaining breast prosthesis. Eligibility criteria apply.
- Application obtained and processed through [The Cancer Council Tasmania](#)
- Obtain prosthesis from Registered Providers, provider list available from [The Cancer Council](#).

The Cancer Council Tasmania Contact Details

To find out about your nearest Cancer Support Centre
call 13 11 20 for the cost of a local call, or email us at:

infotas@cancertas.org.au

Related Topics

[14.1 Travel and Accommodation](#)

[14.3 TCCT](#)

[14.4 My Journey Kit](#)

[14.5 Local Information](#)

Wig and Hat Scheme

Statewide

The Department of Health and Social Services (DHHS) provides a **\$170** entitlement subsidy for a wig or two hats. Eligibility requirements apply

Obtain a referral from doctor administering chemotherapy

Northern and Southern regions

Ring Occupational Therapy to set an appointment for a wig or turban:

North	6348 7143
South	6222 8186

North West **6440 7094**

Ring Aids & Appliances Coordinator to arrange an appointment

NOTE: turbans can be purchased at cost from The Cancer Council Tasmania

The Cancer Council Tasmania
13 11 20 for the cost of a local call, or
email : infotas@cancertas.org.au
<http://www.cancertas.org.au>

Acknowledgements:

This information was provided by the Cancer Council of Tasmania for further information please contact :

[The Cancer Council Tasmania 13 11 20](#)

Related Topics

[14.1 Travel and Accommodation](#)

[14.3 TCCT](#)

[14.4 My Journey Kit](#)

[14.5 Local Information](#)

The Cancer Council Tasmania

is an excellent resource for a range of information including

- Practical information
- Support
- Support for children, partners and friends.

Contact Details

To find out about your nearest Cancer Support Centre

call **13 11 20** for the cost of a local call, or email The Cancer Council Tasmania

at: infotas@cancertas.org.au

STATE OFFICE

184 Collins Street

HOBART TAS 7000

Phone: (03) 6233 2030

Fax: (03) 6233 2123 Phone: **1800 063 347**

Southern Cancer Support Centre

184 Collins Street

HOBART 7000

Phone: (03) 6233 2030 / (03) 6233 2088

North West Cancer Support Centre - Burnie

54 Cattley Street

BURNIE 7320

Phone: (03) 6434 6363

Northern Cancer Support Centre

216 Charles Street

LAUNCESTON 7250

Phone: (03) 6336 2030

North West Cancer Support Centre - Devonport

103 Oldaker Street

DEVONPORT 7310

Phone: (03) 6421 7887

Resource order forms

The Cancer Council Tasmania

Related Topics

[14.1 Travel and Accommodation](#)

[14.2 Practical and Financial](#)

[14.4 My Journey Kit](#)

[14.5 Local Information](#)

My Journey Kit

The Breast Cancer Network of Australia has developed an excellent kit for women newly diagnosed with breast cancer. This Kit is also a useful resource for health workers working with women with breast cancer.

[My Journey Kit](#) is a comprehensive free information kit for women diagnosed with breast cancer within the last 12 months. Telephone our automated request line on **1300 78 55 62** for your copy, 24 hours a day, 7 days a week.

Order on line www.bcna.org.au

Related Topics

[14.1 Travel and Accommodation](#)

[14.2 Practical and Financial](#)

[14.3 TCCT](#)

[14.5 Local Information](#)

Local Information

[illegible]

Related Topics

14.1 Travel and Accommodation

14.2 Practical and Financial

14.3 TCCT

14.4 My Journey Kit

15. GENERAL RESOURCES

15.1 Support Groups

The Cancer Council

Breast Cancer Network Australia

Local Support Groups

15.2 Partners and Children

15.3 Resources

The Cancer Council

Please see [Section 14 Practical Resources](#) for information on the Cancer Council.

Breast Cancer Network of Australia (BCNA)

293 Camberwell Rd
Camberwell VIC 3124
Phone: (03) 9805 2500
Fax: (03) 9805 2599
Email: beacon@bcna.org.au
Website: www.bcna.org.au

Free Call: 1800 500 258

The BCNA produces *The Beacon*—a newsletter for women with breast cancer. For Tasmanian State representatives please see below.

Karen Forster	Pauline Watson
1a Elf Avenue	90 Quarantine Rd
Glenorchy Tas 7010	Kings Meadows
Tel: (03) 6273 4422	Tel (3) 6344 8968
Mobile: 0439 734 422	
Email: dforster@vtown.com.au	

Tasmanian Breast Cancer Network

The Cancer Council of Tasmania [Support Centres](#)

Related Topics

[15.2 Partners and Children](#)

[15.3 Resources](#)

Support Groups

Local Breast Cancer Support Groups

Cancer support groups offer a safe place for people to share experiences and emotions with others who have been affected by cancer. The group setting fosters discussion and sharing of ideas and is also an opportunity to explore coping strategies, stress management and issues relating to an individuals' cancer. Support group membership is offered to people with cancer as well as their family members. Groups generally meet monthly.

For more information on support groups in your area contact your nearest Cancer Support Centre.

Town	Name	Contact details
Beaconsfield "Cancer Change"	Jane Chapman	63831494 6383 1104
Campbell Town Cancer Support Group	Anna Lovett	6381 3300
Cygnets	Margaret Batchelor	6229 5206
Cygnets Younger Women	Angela McDonald	6267 1409
Devonport	Sherrian O'Connor	
Devonport Younger Women	Zarna Mace	6429 3233
East Coast Group	Judi Hastie	6257 1530
Flinders Island		
Hobart	Hobart Women's Health Centre Nola Polmear	6231 3212 6222 7602

Related Topics

[15.2 Partners and Children](#)

[15.3 Resources](#)

Local Breast Cancer Support Groups cont'd

Town	Name	Contact details
King Island	Anna de la Rue	6462 1311
Kings Meadows	Marg Tassell Pauline Watson	6331 2280 6344 8968
New Norfolk / Ouse "CANHOPE"	Margaret Clark	6261 3272
Pittwater / Midway Point "Meeting with Friends"	Susie Edwards	6265 1155
Rosebery	Norma Hudson	6431 6470
St Helen's		
St Marys		
Swansea		
Tasman Group	Elaine Ball Alice Shoobridge	6250 2173
Triabunna		
Ulverstone	Helen Rockliff	6425 1568

Related Topics

[15.2 Partners and Children](#)

[15.3 Resources](#)

Partners and Children

Publications:

[I want to help: when cancer has been diagnosed in a relative, friend, workmate or neighbour](#) The Cancer Council Tasmania

[‘My Mum’s got cancer’](#) The Cancer Council Tasmania

[Information for partners](#)—National Breast Cancer Centre

[What the woman you love will be feeling, and how to understand—and help—](#)
National Breast Cancer Centre

[How do you feel?](#) —National Breast Cancer Centre

[A carer’s toolkit](#)—National Breast Cancer Centre

[Boys do cry](#) Community Kit —National Breast Cancer Centre

[Impact on children](#) —National Breast Cancer Centre

[Kidscope](#)

[Myparentscancer](#) —National Breast Cancer Centre

Resources for friends or colleagues

[Helping a friend or colleague with breast cancer](#) (2002) (Australian)

Author/ publisher: Breast Cancer Network Australia

Available from: Breast Cancer Network Australia 1800 500 258

In this brochure, women who have had breast cancer share with you the things they found helpful and unhelpful.

Related Topics

[15.1 Support Groups](#)

[15.3 Resources](#)

Resources

There is a huge range of resources available for free or at a cost. This resource has listed for each Section, where to obtain those specific resources.

If you want to investigate further resources, the following websites are good starting points:

[National Directory of Hospital Based Services](#)—National Breast Cancer Centre

[NBCC Resources](#) National Breast Cancer Centre

[My Journey Kit](#) Breast Cancer Network Australia (BCNA)

[Resource order forms](#) The Cancer Council Tasmania

[NHMRC Breast Cancer Publications](#) National Health and Medical Research Council

[Tips for finding reliable breast cancer resources online](#)—Breast Cancer Network Australia (BCNA)

Newsletters

[Clinical Update](#)

For surgeons, medical oncologists and radiation oncologists. A quarterly newsletter which reviews recent research articles with immediate significance to clinical practice.

Related Topics

[15.1 Support Groups](#)

[15.2 Partners and Children](#)

Resources

Newsletters

Breastfax

Monthly newsletter of the National Breast Cancer Centre, with the latest in the Centre's activities and projects. This one-page update includes information about the Centre's launches and new projects. Sent as a fax or can be sent as an email and viewed with Acrobat Reader.

Related Topics

[15.1 Support Groups](#)

[15.2 Partners and Children](#)

16. PROFESSIONAL DEVELOPMENT

16.1 Multidisciplinary Care

16.2 Communication Skills

16.3 Specialist Breast Nurse Training

16.4 GP Resources

Multidisciplinary cancer care (MDC)

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

Treatment and supportive care for people with cancer involves a number of different medical and allied health care professionals. Evidence indicates that a team approach to cancer care, in which health care professionals together consider all treatment options and develop an individual treatment plan for each patient, can reduce mortality and improve quality of life for the patient.

Such an integrated approach to health care is known as multidisciplinary care (MDC).

There is growing evidence that MDC improves the cancer journey experience and the outcomes of the case.

Further Information:

[Multidisciplinary Cancer Care in Australia—an overview.](#)—
National Breast Cancer Centre

[Multidisciplinary meetings for cancer care - a guide for health service providers](#)—National Breast Cancer Centre

Related Topics

[16.2 Communication Skills](#)

[16.3 Specialist Breast Nurse Training](#)

[16.4 GP Resources](#)

Communication Skills

Reproduced with permission from the National Breast Cancer Centre (NBCC website) : www.nbcc.org.au

The NBCC has developed a series of evidence-based communication skills modules that provide a summary of the relevant research and guidelines about how best to address issues when communicating with patients with cancer.

Each module comprises a concise summary of the relevant literature and research with reference to the NBCC and NCCI's Clinical practice guidelines for the psychosocial care of adults with cancer.

Workshop style and content

Past reviews of research have shown that communication skills training workshops are most effective when they are interactive, encourage participation, allow skills to be practised and allow participants to receive feedback on their performance. A combination of these strategies is ideal and can lead to improvements in communication skills. Interactive workshops give health professionals the opportunity to practice communication techniques in a safe and supportive environment.

Participants are invited to practice their skills and receive feedback from the facilitator(s) and other participants. The role play provides the opportunity for participants to experiment in a safe environment with techniques and approaches they would not normally use in their clinical practice.

Workshop modules

The NBCC has to date developed 11 evidence-based communication skills training modules. For this series of Communication Skills Training Grants the

Related Topics

[16.1 Multidisciplinary Care](#)

[16.3 Specialist Breast Nurse Training](#)

[16.4 GP Resources](#)

Communication Skills *cont'd*

following NBCC modules are available:

- [Breaking bad news](#)
- [Discussing the transition from curative to palliative care](#)
- [Communication skills for radiographers performing mammography](#)
- [Addressing the needs of younger women with breast cancer](#)

Related Topics

- [16.1 Multidisciplinary Care](#)
- [16.3 Specialist Breast Nurse Training](#)
- [16.4 GP Resources](#)

Specialist Breast Nurse Competency Standards

Competency Standards for Specialist Breast Nurses are available at the NBCC website. For more information click on this link: [SBN Competency Standards](#)

Breast Care Nurse courses

Victoria – The Cancer Council Victoria/[La Trobe University Breast Cancer Distance Education Program](#) has been running for five years with over 600 nurses who have graduated as accredited Breast Care Nurses throughout Australia. For more information click on this link: [La Trobe University Breast Cancer Distance Education Program](#).

New South Wales - [Breast Cancer Nurse Practicum](#) – The College of Nursing offers a week long practicum which is part of a project whose aim is to improve the access of women with breast cancer in rural areas to coordinated care, support services, advice and information in relation to their condition. For more information on click on this link [Breast Cancer Nurse Practicum](#).

West Australia – Specialist Breast Nurse course Edith Cowan University

For further information contact

School of Nursing & Public Health

Ph: Nursing Reception (08) 9273 8534

E-Mail: snmpm@ecu.edu.au

Related Topics

[16.1 Multidisciplinary Care](#)

[16.2 Communication Skills](#)

[16.4 GP Resources](#)

GP resources

[Advice about familial aspects of breast cancer and epithelial ovarian cancer](#)

[Advice about familial aspects of breast cancer and ovarian cancer: a guide for health professionals](#)

[Aromatase inhibitors as adjuvant endocrine therapy](#)

[Breast fine needle aspiration cytology and core biopsy; a guide for practice.](#)

[Clinical practice guidelines for the management and support of younger women with breast cancer](#)

[Clinical practice guidelines for the management of advanced breast cancer](#)

[Clinical practice guidelines for the management of early breast cancer \(2nd ed.\)](#)

[Clinical Practice Guidelines for the psychosocial care of adults with cancer - A summary guide](#)

[Investigation of a new breast symptom: a guide for general practitioners](#)

[MDC resources](#)

[Multidisciplinary Cancer Care in Australia](#)

Related Topics

[16.1 Multidisciplinary Care](#)

[16.2 Communication Skills](#)

[16.3 Specialist Breast Nurse Training](#)

GP resources *cont'd*

[Multidisciplinary meetings for cancer care—a guide for health providers](#)

[The clinical management of Ductal Carcinoma in situ \(DCIS\), Lobular Carcinoma in situ \(LCIS\) and atypical hyperplasia of the breast.](#)

[The management of the woman with metastatic breast cancer](#)

The [Cancer Institute NSW](#) has developed The Standard Cancer Treatment protocols program (CI-SCaT) which enables cancer clinicians and general practitioners to access complete treatment protocols, their supporting evidence and dose calculation. Patients and the public can also find detailed information on their treatment and its side effects.

Currently, the CI-SCaT site lists over 350 evidence-based protocols for medical oncology and haematology. The site is being expanded with protocols that address bone marrow transplantation, radiotherapy, palliative care and nursing procedures. The site experiences significant patronage and is now widely accessed throughout NSW and in other states.

[Cancer Institute NSW's CI-SCaT site](#)

Related Topics

[16.1 Multidisciplinary Care](#)

[16.2 Communication Skills](#)

[16.3 Specialist Breast Nurse Training](#)

17. GLOSSARY

ABBI Advanced Breast Biopsy Instrument

Adjuvant chemotherapy/hormone therapy The use of either chemotherapy or hormone therapy after initial treatment either by surgery or radiotherapy. The aim of adjuvant therapy is to destroy any cancer that has spread.

Alopecia Loss of hair. A common complication of chemotherapy. May be partial or complete but full recovery always takes place.

ANDI Abberations of Normal Development and Involution. Normal changes which occur in the breast in relation to breast growth and regression, eg fibrous tissue formation "nodularity", "lumpiness", cysts, fibroadenomas, numerous benign pathologies.

Anti-oncogene See **tumour suppressor gene**.

ANZBCTG Australian and New Zealand Breast Cancer Trials Group. It is a trans-Tasman clinical trials group which conducts research on new treatments for breast cancer.

Aspiration biopsy suction of cells in fluid from a cyst or from a solid mass through a fine needle for microscopic examination and diagnosis. ([See FNA](#))

Atypia Abnormal changes in cells. See also dysplasia.

Axilla the armpit; axillary, the adjective, as in the axillary lymph nodes.

Axillary dissection Surgery to remove fat and lymph nodes from the armpit. It can be done either at the same time as a mastectomy or as a separate operation. It can be partial or complete.

Benign lesion a non-malignant growth which does not spread to other parts of the body.

Biopsy removal of material for microscopic diagnosis. Can be aspiration by a needle to remove cells, can be removal of a tissue sample by a "core" needle, or surgical removal of part or all of the lesion. (See also [Localisation Biopsy](#) and ABBI.)

Body image A person's conception of and feelings about his or her body - its form, size, shape and the way it fits society's norms. Self-esteem and sexuality are linked with body image.

Bone scan A test to see whether the cancer has spread to any bones.

Boost An extra dose of radiation given to a smaller area, usually the site where the tumour was removed, after the rest of the breast has been irradiated.

BRCA1 Breast cancer gene 1. A gene which is defective in about 2% of women with breast

cancer. See also **familial breast cancer**.

BRCA1, 2 Technical term for two genes involved in familial breast cancer.

Breast conservation The treatment of breast cancer by tumour excision and radiotherapy in which the breast is retained (conserved) in contrast to its removal (mastectomy). Rarely, radiation therapy is omitted.

Breast conserving surgery Surgery where the cancer is removed, together with a margin of normal breast tissue. The whole breast is not removed.

Breast reconstruction The formation of a breast shape after a total mastectomy.

Breast sharing A method of reconstruction in which some of the opposite breast is used to reconstruct the missing breast.

Calcification The deposition of calcium salts in body tissues. In the breast, it can be associated with either normal or cancerous tissue.

Cancer a general term for more than 100 diseases characterised by abnormal and uncontrolled division of cells. Cancer cells can invade and destroy surrounding normal tissue, and spread within the body by blood or body fluids to start secondary tumours in other parts of the body. (These are called "metastases").

Carcinoma A malignant tumour arising from epithelial cells, which are cells lining the external or internal surfaces of the body. Carcinomas spread to nearby tissues. They may also spread to distant sites such as lung, liver, lymph nodes and bone. See also [metastasis](#)

Carcinoma NOS Invasive ductal carcinoma not otherwise specified. Comprises 70 per cent of all breast cancers

[Carcinoma-in-situ \(DCIS\)](#) cancer which has not spread from its place of origin in a breast lobe (LCIS) or duct (DCIS).

Cathepsin D A protein secreted by breast cancer cells. It may be a marker of poor prognosis.

Centigray A measure of radiation. 1 centigray = 1 rad.

Chemotherapy The use of medications (drugs) that are toxic to cancer cells. These drugs kill the cells, or prevent or slow their growth.

Chemotherapy cycle Chemotherapy is administered at regular intervals. The interval which

Related Topics

includes time for treatment and time for recovery is a cycle – usually 3-4 weeks.

Chromosome A body in the cell nucleus carrying genes. See gene.

CLE See **complete local excision**.

Clinical trial Research conducted with the patient's permission which usually involves a comparison of two or more treatments or diagnostic methods. The aim is to gain better understanding of the underlying disease process and/or methods to treat it.

CMF A common combination of three drugs used in the treatment of breast cancer. Cyclophosphamide, Methotrexate and 5-fluoro-uracil.

Combined modality treatment The integration of two or more forms of treatment to combat the cancer. For example radiation and surgery; radiation and chemotherapy; surgery, radiation and chemotherapy.

Comedo carcinoma in situ An aggressive type of breast carcinoma.

Complete local excision The complete removal of a tumour with a surrounding margin of normal breast tissue. Also known as CLE and breast conserving surgery.

Conservation treatment See Breast Conservation

Conservative surgery Surgery in which the breast is not removed. Also known as breast conserving surgery.

Coping strategies Strategies or behaviours used to reduce psychological stress. Coping strategies may be influenced by personality style and the specific situation, and may change over time.

Core biopsy The sampling of breast tissue with a needle to give a tiny cylinder of tissue for examination by a pathologist.

Cosmesis The appearance of the breast following treatment.

Cribriform See **Non-comedo carcinoma**.

Cycle Chemotherapy is usually administered at regular intervals. A cycle is a course of chemotherapy followed by a period in which the body recovers.

Cyst fluid-filled mass. They can be left alone or the fluid can be removed by aspiration with a fine

Related Topics

needle to be examined by a pathologist. These are not solid lumps and are usually benign. Small cysts are a common finding in ultrasound – see **ANDI**.

Cytology An examination by a pathologist of the cellular structure of a tissue.

DCIS Ductal carcinoma in situ. A form of breast cancer which requires special consideration. It spreads along the ducts of the breast, rather than forming a lump.

Denial Inability to acknowledge something apparent to others. It can be an involuntary coping strategy.

Depression A pervasive and sustained lowering of mood. Other features include tearfulness, guilt, irritability, loss of interest in life, loss of energy, poor concentration, poor sleep and loss of appetite.

Desquamation Shedding of the skin as a reaction to radiotherapy. In its mildest form it is "dry" when the skin flakes in a powdery form. In a more severe form ("wet") the deeper layers of the skin are exposed. This form is particularly likely to occur where the skin is naturally moist and/or subject to friction i.e. in the axilla or under the breast during radiotherapy treatment.

Differentiation The degree to which a tumour resembles normal tissue. In general, the closer the resemblance, the better the prognosis. Well differentiated tumours closely resemble normal tissue.

Disease-free survival The time from the primary treatment of the breast cancer to the first evidence of cancer recurrence.

Dissection A careful operation which removes some structures but preserves others, eg in breast cancer removal of the axillary lymph nodes = axillary dissection.

Dry desquamation A reaction to radiotherapy involving the shedding of dry skin

Ductal carcinoma in situ See **DCIS**.

Ducts channels within the breast which pass milk from the lobules, where it is made, to the nipple.

Dysplasia An abnormal growth of cells which look something like cancer cells, but do not have all the features of cancer. See also **atypia**.

ECOG Eastern Cooperative Oncology Group. A group of American oncologists which conducts trials on cancer treatments.

Related Topics

ECOG performance status A five point scale developed by the Eastern Cooperative Oncology Group.

- 0 - No symptoms of cancer
- 1 - Presence of cancer-related symptoms
- 2 - Spends less than 50% of daylight hours in bed
- 3 - Spends more than 50%, but less than 100% of daylight hours in bed
- 4 - Totally confined to bed

EGF-R Epidermal growth factor receptor. A protein on some cancer cells. Cancers with plenty of EGF-R are likely to be aggressive. See also **erbB-2**.

Electron A form of radiation distinct from x-rays. Commonly used as part (boost) of breast conservation radiotherapy to give a higher dose to where the tumour started.

Electron The smallest particle of negative electricity.

Endocrine therapy (hormonal therapy) treating breast cancer by changing the hormonal balance of the body.

EORTC European Organisation for Research and Treatment of Cancer. A group which carries out clinical trials on cancer therapies.

EORTC core quality of life questionnaire (QLQ) A questionnaire designed to determine the impact on quality of life of different treatments.

Epidermal growth factor receptor See EGF-R.

ER Oestrogen receptor. A protein on breast cancer cells that binds oestrogens. It indicates that the tumour may respond to hormonal therapies. Tumours with plenty of ER have a better prognosis than those which do not.

erbB-2 Also known as HER2/neu. A protein similar to EGF-R. Tumours with plenty of erbB-2 are usually aggressive.

Erythema Redness of the skin, the earliest and mildest reaction of the skin to radiation.

Familial breast cancer Breast cancer affecting two or more close relatives, especially in premenopausal women. It implies an inherited disposition.

Fibrocystic Disease Not a 'disease', occasionally associated with larger cysts. Same condition as ANDI (see [ANDI](#)).

Related Topics

Fine needle biopsy (FNB) The sampling of cells from breast tissue for examination by a pathologist.

Fraction Radiotherapy is usually given over several weeks. The dose delivered each day is known as a fraction.

Free flap reconstruction Breast reconstruction using microsurgery.

Frozen section A rapid method of obtaining a pathological examination of tissue during an operation. This is not routinely used in breast cancer.

G-CSF Granulocyte cell stimulating factor. A natural substance which promotes the growth of white cells. It can be used after chemotherapy.

Gene The functional unit of heredity. Each gene sits on a chromosome within the cell nucleus.

Grade The degree of similarity of the cancer cells to normal cells. This is assessed by a pathologist. A grade 1 carcinoma is well differentiated and is associated with a good prognosis. A grade 2 carcinoma is moderately differentiated and is associated with an intermediate prognosis. A grade 3 carcinoma is poorly differentiated and is associated with a poor prognosis. Grade is assessed by a pathologist.

Gray The modern unit of radiation dosage. Doses used in treatment for early breast cancer range from 45 and 65 Gray. See also **rad**.

Gynaecologist a doctor who specialises in treating diseases of women's reproductive organs.

Haematoma An area of clotted blood, a bruise.

Halsted mastectomy See **radical mastectomy**.

HER2/neu See **erbB-2**.

Histology An examination of the structure of a cell by a pathologist.

Hookwire wire placed in the breast by a radiologist to guide the surgeon to an area which cannot be felt.

Hormone receptors Proteins in a cell which bind to specific hormones. This binding stimulates the cell to act in a certain way.

Related Topics

Hormone therapy The use of drugs or hormones which specifically inhibit the growth of hormone responsive cancer cells.

Hormones chemical produced by glands in the body which circulate in the blood stream and control actions of cells and organs. Oestrogens are an example.

Hyperplasia Increased numbers of epithelial cells. If excessive, there is a slightly increased risk of developing subsequent breast carcinoma.

Immediate reconstruction The reconstruction of the breast at the time of mastectomy.

In situ carcinoma See **carcinoma in situ**.

Increment See **fraction**.

International Breast Cancer Study Group An international cooperative group which includes many Australian clinical researchers. The group is carrying out multicentre trials, especially in the area of chemotherapy.

Iridium (wire) A radioactive wire often used to deliver the boost to the operative site in breast conserving techniques.

Iridium Wire Radioactive wire which can be implanted temporarily in the breast as a boost dose. Now seldom used.

Large cell in situ carcinoma See [comedo carcinoma](#).

Latissimus dorsi flap A method of reconstruction using skin from the back, which is carried on the latissimus dorsi muscle.

LCIS Lobular carcinoma in situ. It is a misnomer which describes a benign process in the breast. It is not a carcinoma. It is usually detected by chance in the course of a breast biopsy for another lesion.

Lesion A definite abnormality either seen on mammography or ultrasound. It may or may not be felt.

Limited axillary dissection Surgery to the armpit in which not all lymph nodes are removed.

Linear accelerator Standard radiation therapy apparatus.

Lobule a part of a breast lobe (a woman's breast has 15 to 20 lobes where milk is produced).

Related Topics

Local recurrence Return of the cancer in the affected breast.

Localisation Biopsy Using mammography or ultrasound a wire is guided to the lesion which usually cannot be felt and has been seen on a previous imaging. This area can then be removed for microscopic diagnosis.

Lumpectomy a surgical procedure to remove a lump in the breast with a margin (or rim) of normal tissue. See **Wide Local Excision**.

Lymph node A small collection of tissue along the lymphatic system which acts as a filter. White cells and cancer cells, in particular, collect in lymph nodes. They are found in the neck, the armpit, the groin and many other places. Lymph nodes are also known as glands.

Lymphatic system A system of vessels which drains fluid out of the head, neck and limbs and returns it to the general circulation.

Lymphoedema Chronic swelling of the arm, which may be prominent in about 5% of patients after treatment of the axilla by surgery or radiotherapy.

Magnetic resonance imaging (MRI) a technology which uses magnetic fields rather than x-rays to produce images of the body structure.

Malignant a growth of cells which have the ability to invade and destroy body tissues. The opposite of benign.

Mammogram A soft tissue x-ray of the breast which may be used to evaluate a lump or which may be used as a screening test in women with no signs or symptoms of breast cancer.

Mammography The process of taking a mammogram

Margins of resection The edge of the tissue removed. See complete local excision

Mastectomy Surgical removal of the breast. May be total (all of the breast) or partial. See also **radical (Halsted) mastectomy**.

Medical oncologist A doctor who specialises in the use of chemotherapy and hormone therapy.

Megavoltage High energy x-rays which are used in modern curative radiotherapy.

Meta-analysis A statistical technique used to examine all research on a particular issue.

Metastasis The spread of a cancer from the primary site to somewhere else via the bloodstream or the lymphatic system.

Related Topics

Metastasise See metastasis (above).

Metastatic cancer Cancer which has spread to a site distant from the original site.

Micrometastases Small undetectable deposits of cancer which grow later.

Micropapillary See **non-comedo carcinoma**.

Mitosis The process of cell division.

Modified radical mastectomy Total mastectomy with removal of lymph nodes in the armpit, but without removal of the muscles of the chest.

Moist desquamation A response to radiotherapy in which skin peels off. It is made worse by friction and sweat.

Nadir The lowest measured value. In cancer treatments, it usually refers to the lowest white blood cell and platelet count.

Nausea Feeling sick or wanting to be sick. If it is caused by chemotherapy, it can last for anywhere between a few hours and a week.

Necrosis The death of an individual cell or groups of cells in living tissue. Sometimes seen in carcinomas.

Neutropenia (febrile) A decreased number of white cells in the blood, which greatly increases the risk of infection. It usually occurs as a result of chemotherapy.

Nodal status The presence or absence of cancer in the lymph nodes of the armpit. A woman with cancer in one or more nodes is node positive, or node +ve. A woman with no cancer in her nodes is node negative, or node-ve.

Non-comedo carcinoma in situ A low grade type of carcinoma.

Occult metastasis A metastasis that has not yet shown up.

Oestrogen a female hormone, produced by the ovaries, adrenal glands and in fat. A relationship exists between oestrogens and breast cancer.

Oestrogen dependent applied to a cancer which needs this female hormone in order to grow.

Related Topics

Oestrogen independent a cancer which can grow without this hormone.

Oestrogen receptor See **ER**.

Oestrogen receptor assay (ER) a test to see if a breast cancer retains the normal hormone responding mechanism.

Oncogene A gene which, functioning abnormally, encourages normal cells to turn cancerous.

Oncology the study of cancer. An "oncologist" is a clinician who specialises in cancer treatment. A "surgical" oncologist is a specialist in treating cancer by surgery; a "medical" oncologist treats cancer using chemo-or endocrine therapy; a "radiation" oncologist treats cancer with high-dose x-rays and radioactive isotopes.

Oncology nurse A registered nurse who is educated in the care of people with cancer.

Oophorectomy Surgical removal of the ovaries, occasionally used in the adjuvant treatment of breast cancer.

Open biopsy Surgery performed under local or general anaesthetic in which a sample of breast tissue is removed so it can be examined by a pathologist.

Orthovoltage X-rays delivered from generators operating at less than 500,000 volts.

Overall survival The time from the primary treatment of the breast cancer to death.

p53 A protein which, when the gene for it is damaged, leads to an increased risk of breast cancer.

Palliation The alleviation of symptoms due to the underlying cancer, without prospect of cure.

Palpation examining with the hands. A "palpable" breast lump is one that can be felt by pressing on the surface of the breast.

Parasthaesia 'pins and needles' which can occur after an axillary dissection.

Partial or segmental mastectomy a surgical procedure in which only a portion of the breast is removed see **Lumpectomy, Wide Local Excision**.

Patey's operation An operation in which the breast and lymph nodes of the armpit are removed, but not the pectoralis major muscle. See also **modified radical mastectomy**.

Related Topics

Pathologist a doctor who identifies or diagnoses diseases such as breast cancer by examining cells and their surrounding tissue under a microscope.

Plastic surgeon a doctor who specialises in rehabilitative surgery – including breast reconstruction.

Postmenopausal After menopause.

PR Progesterone receptor. A receptor inside the cell which binds progesterone. Tumours with plenty of PR are less aggressive and more responsive to hormone therapy than those without.

Predictive factor Something which helps predict what may happen. For example, the oestrogen receptor is a predictive factor for a good response to hormone therapy.

Premenopausal Before menopause

Primary breast cancer Breast cancer arising in the breast.

Primary breast tumour Tumour arising in the breast.

Progesterone a female hormone, produced by the ovaries only during a specific time of a woman's menstrual cycle.

Progesterone receptor See **PR**.

Progesterone receptor (PR) assay a test in addition to the ER assay.

Prognosis An estimate of what is likely to happen in the future.

Prognostic factors Factors which are associated with a better or worse outcome of the disease. They are not the same as causes.

Prognostic indicators (also called "markers") characteristics of breast cancer used to predict the likelihood of recurrence or spread.

Progression The continuing growth of the cancer.

Prosthesis An artificial part designed and fitted to overcome a defect in the body. A breast prosthesis is padding that fits within the bra to give the shape of breast tissue.

Prosthetic breast reconstruction Creation of a breast shape using an artificial breast.

Protocol A detailed program of treatment.

Related Topics

pS2 A protein which may reflect ER status. People with plenty of pS2 usually have a good prognosis.

QLQ See **EORTC Core Quality of Life Questionnaire (QLQ)**.

Quadrantectomy removal of a sector of the breast (see Wide Local Excision).

Quality of life The individual's overall appraisal of their situation and subjective sense of well-being. Quality of life encompasses symptoms of disease, side-effects of treatment, relationships, how well you get on at work and play and how you cope with daily life.

Rad An old unit of radiation dose now superseded by the Gray. 1 Gray = 100 rads.

Radiation oncologist A doctor who specialises in treating cancer with radiation. Also known as a radiotherapist.

Radiation therapy uses high energy x-rays to kill any cancer cells left behind (adjuvant radiotherapy) after surgery. It can treat cancer without the routine use of surgery (definitive radiotherapy).

Radical (Halsted or standard) mastectomy an obsolete surgical procedure in which the entire breast, the chest muscles underneath and the lymph nodes in the axilla were removed.

Radiographer A technician who gives radiotherapy prescribed by a radiation oncologist.

Radiologist a doctor who specialises in identifying abnormalities and diseases – including breast cancer using X-rays.

Radiotherapy The use of radiation, usually x-rays or gamma rays, to kill tumour cells.

Reconstructive mammoplasty a surgical procedure (plastic surgery) to recreate the contours of a lost breast by means of an artificial implant placed under the skin or by transplanting a woman's own tissue from another part of her body.

Rectus flap reconstruction Breast reconstruction using skin and fat from the abdomen carried on the rectus abdominis muscle, which runs down the middle of your abdomen. Also known as TRAM - transverse rectus abdominis myocutaneous flap.

Recurrence return of cancer growth either at the original site (a "local" recurrence) or as metastases (secondaries) in other parts of the body.

Relapse Recurrence of disease after an initial response to treatment.

Related Topics

Remission A reduction or disappearance of the symptoms of cancer. It can be partial or complete.

Response to therapy - complete response The disappearance of all detectable cancer for a minimum of one month. Also known as remission.

Response to therapy - disease progression Continued growth of the cancer.

Response to therapy - partial response (partial remission) A reduction in size of the cancer of 50% or more.

Response to therapy - stable disease. No change in the cancer.

Scan The imaging of an organ or part of the body using tracer amounts of radioactive chemicals e.g. Bone scan, ultrasound or liver scan.

Scleroderma A disease involving tightening of the skin and of the lining of the oesophagus.

Secondary reconstruction Reconstruction of the breast carried out some time after the original mastectomy.

Secondary tumour A deposit of breast cancer away from the breast (such as in the lung, bone or lymph node). **See metastasis.**

Segmental resection (local excision, wide excision, lumpectomy) surgical removal of a cancer along with some surrounding normal tissue.

Segmentectomy The excision of an entire segment of the breast.

Simulator A machine which closely resembles a linear accelerator which allows the necessary calculations to be made before starting treatment.

Simulator A machine which allows a radiation oncologist to calculate the correct dose and position of the radiotherapy.

Small cell carcinoma See [non-comedo carcinoma](#).

Soft tissue reconstruction A method of breast reconstruction using the patient's own tissue, transferred from another part of the body.

Sonographer A technician trained in performing ultrasounds.

Specimen X-ray An X-ray of a surgically removed specimen to confirm that a mammographically

Related Topics

detected cancer has been removed.

Staging Refers to the allocation of categories (0, I, II, III, IV) to groupings of tumours defined by internationally-agreed criteria. Staging helps determine treatment and prognosis.

Subcutaneous mastectomy An operation in which the tissue of the breast is removed but the skin and nipple are not.

Support group A group of people you can turn to for emotional support. The group may also provide practical help, information, guidance and feedback about your stressful experiences and ways of coping.

Surgical oncologist A surgeon who specialises in the care of people with cancer.

Tamoxifen an antiestrogenic drug which blocks the growth of breast cancer tumours whose cells depend on oestrogen to divide.

Telangiectasia Small dilated blood vessels which appear in areas which have been heavily irradiated.

Tissue expansion Creation of a breast shape using an inflatable envelope placed under the skin and muscle. It is gradually expanded over several weeks by repeated injections of salt water.

Total (or simple) mastectomy Surgery to remove the entire breast, including the nipple and areola but not the axillary lymph nodes or chest muscles.

Toxicity Side-effects which are due to treatment.

Transverse rectus abdominis myocutaneous flap (TRAM) See rectus flap reconstruction.

Treatment failure The inability of the treatment to halt the growth or spread of the cancer.

Tubular carcinoma A very well differentiated carcinoma seen increasingly as a result of mammographic screening.

Tumour An abnormal growth of tissue. It may be localised (benign) or invade nearby tissues (malignant) or distant tissues (metastatic).

Tumour suppressor gene A gene which usually prevents cancers growing. When it is not functioning normally, tumours can grow. Examples include p53 in breast cancer, RB protein in retinoblastoma and possibly BRCA1 in breast cancer. Also known as an anti-oncogene.

Related Topics

Ultrasonography (ultrasound) a technique using high-frequency sound waves for imaging the contents of the breast or other parts of the body. Echoes are converted to photo images that can be seen on a TV monitor or film as a "sonogram".

Vascular infiltration Invasion by cancer cells of lymphatics or veins. It is a sign that the tumour is likely to spread.

Wide Local Excision This is a more appropriate term for the removal of breast cancer with a surrounding rim of normal tissue see **Lumpectomy**. Other terms, CLE (Complete Local Excision); Quadrantectomy, Partial Mastectomy, Tylectomy, are essentially the same thing.

X-rays low energy radiation which is used, at very low doses, to detect abnormalities and cancer (e.g. mammography) in radiation therapy, high energy radiations destroy cancer cells.

Related Topics