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Breast Diseases

Fourth Edition

EDITED BY

J Michael Dixon
Professor of Surgery and Consultant Surgeon
Edinburgh Breast Unit, Western General Hospital, Edinburgh

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Contributors

Nigel Bundred
Professor of Surgical Oncology, Academic Department of Surgery, University Hospital of South Manchester, Manchester, UK

Jack Cuzick
Wolfson Institute of Preventive Medicine, Queen Mary University of London, London, UK

J Michael Dixon
Professor of Surgery and Consultant Surgeon, Edinburgh Breast Unit; Clinical Director Breakthrough Research, Western General Hospital, Edinburgh, UK

Gareth Evans
Genetic Medicine, St Mary’s Hospital, Manchester, UK

Belinda Hacking
Consultant Clinical Psychologist and Head of Clinical Health Psychology, Western General Hospital, Edinburgh, UK

Julie Iddon
East Lancashire Hospitals NHS Trust, Lancashire, UK

AA Kotsori
Clinical Fellow, Breast Unit, Royal Marsden Hospital, London, UK

Ava Kwong
Chief of Division of Breast Surgery, Queen Mary Hospital, The University of Hong Kong, Chairman, The Hong Kong Hereditary Breast Cancer Family Registry, Hong Kong; Visiting Associate Professor Department of Oncology, Stanford University School of Medicine, USA

Robert Leonard
Professor of Medical Oncology, South West Wales Cancer Institute, Singleton Hospital, Swansea, UK

Douglas Macmillan
Oncoplastic Breast Surgeon, Nottingham Breast Institute, City Hospital, Nottingham, UK

Julietta Patnick
Director, NHS Cancer Screening Programmes, Oxford University, Oxford, UK

Sarah Pinder
King’s College London and Guy’s and St Thomas’ NHS Foundation Trust, London, UK

Cameron Raine
Consultant Plastic Surgeon, St John’s Hospital, Livingston, UK

Richard Sainsbury
Consultant Surgeon and Honorary Reader in Surgery Department; Princess Anne Hospital, Southampton, UK

Ivana Sestak
Statistician, Wolfson Institute of Preventive Medicine, Centre for Cancer Prevention, Queen Mary University of London, UK

Ian Smith
Consultant Medical Oncologist and Head of Breast Unit, Royal Marsden Hospital and Institute of Cancer Research, UK

Jeremy Thomas
Consultant Pathologist, Pathology Department, Western General Hospital, Edinburgh, UK

Alastair Thompson
Consultant Plastic Surgeon, Canniesburn Hospital, Glasgow, UK

Eva M Weiler-Mithoff
Consultant Radiologist, Department of Clinical Radiology, The Royal Marsden Hospital, London, UK

Robin Wilson
Consultant Radiologist, Department of Clinical Radiology, The Royal Marsden Hospital, London, UK
The incidence of breast cancer continues to increase year on year but thankfully the number of women who die from breast cancer continues to fall. Arguments surround how much of this reduction is due to earlier detection and how much is due to better treatments, but the falling death rate suggests that the vast amounts of money that has been invested in breast cancer is paying dividends. All this investment in research and clinical trials has resulted in an explosion of literature and keeping up to date with the latest advances in the treatment of benign and malignant breast conditions has never been more difficult. The aim of the fourth edition of the ABC of Breast Diseases has been to combine this new knowledge together with what we already knew in a concise, short, evidence based well illustrated book. Despite being compact, it is nonetheless comprehensive and I have tried to include everything even a breast disease specialist might want to know. My aim was also to make it of practical use to doctors in primary care, so the text covers guidelines for referral and management of common benign conditions which are much more frequently seen in general practice than is breast cancer. The numerous pictures make it equivalent in scope to many atlases of breast disease. If you see something related to the breast that you do not recognise the chances are there is a picture of it in the ABC.

There have been many changes since the last edition. New chapters by new authors have been added on the epidemiology of breast cancer, genetics, prevention, management of high risk women and psychological aspects of breast disease. The chapter on systemic therapy of early breast cancer has also been completely rewritten and all other chapters have been revised extensively. New authors have been added to some of these chapters and many new illustrations, tables and graphs have been included.

I write or edit many textbooks on breast disease but the one I use most frequently in my daily clinical practice is the ABC. I use it as an aide memoire and to find it useful in discussions with patients, students and staff in breast clinics. I hope others in primary care and in all branches of hospital practice find this new edition of value and even more informative than the third edition.

Thanks to all who have made the book possible. The authors as always have done all that was asked of them. Monica McGill helped interpret my edits, coordinate the many images, and made sure the book arrived at the publishers in a timely and orderly manner. Keerthana Panneer, typesetter and Sally Osborne, copy editor at Wiley-Blackwell converted the authors’ words, my scribbles and the many pictures and tables into the book that you now read. Books take an enormous amount of time and I acknowledge the support my wife Pam and my sons Oliver and Jonathan for their patience while I wrote and edited at home. Most of the clinical photographs are from patients in Edinburgh and I want to personally thank all the women and a few men who agreed to be photographed and signed the medical photography forms to allow me to use their photographs in this book. My patients are my inspiration and the main reason I do what I do. They understand that in the field of breast diseases there is much we do not know. They are also aware however that there is much we do know and they want their doctors to deliver optimal management and treatments that are effective and evidenced based. That brings me full circle and explains why an updated version of the ABC outlining the current optimal approach to the management of patients with benign and malignant breast conditions is needed.

Mike Dixon
Edinburgh
CHAPTER 1

Symptoms, Assessment and Guidelines for Referral

J Michael Dixon\(^1\) and Jeremy Thomas\(^2\)

\(^1\)Edinburgh Breast Unit, Western General Hospital, Edinburgh, UK

\(^2\)Pathology Department, Western General Hospital, Edinburgh, UK

**OVERVIEW**

- Breast conditions account for approximately 25\% of all surgical referrals.
- Guidelines for referral exist to ensure that patients with breast cancer do not suffer delays in referral.
- Cancer can present as localised nodularity, particularly in young women.
- All discrete masses and the majority of localised asymmetric nodularities require triple assessment.
- Delay in diagnosis of breast cancer is the single largest cause for medicolegal complaints.

One woman in four is referred to a breast clinic at some time in her life. A breast lump, which may be painful, and breast pain constitute over 80\% of the breast problems referred to hospital and breast problems constitute up to a quarter of all female surgical referrals (Table 1.1).

When a patient presents with a breast problem the question for the general practitioner is: “Is there a chance that cancer is present and, if not, can I manage these symptoms myself?” (Figure 1.1; Tables 1.2 and 1.3).

For patients presenting with a breast lump, the general practitioner should determine whether the lump is discrete or there is nodularity, as well as whether any nodularity is asymmetrical or is part of generalised nodularity (Figure 1.2). A discrete lump stands out from the adjoining breast tissue, has definable borders and is measurable. Localised nodularity is more ill defined, is often bilateral and tends to fluctuate with the menstrual cycle. About 10\% of all breast cancers present as asymmetrical nodularity rather than a discrete mass. When the patient is sure that there is a localised lump or lumpiness, a single normal clinical examination by a general practitioner is not enough to exclude underlying disease (Tables 1.2 and 1.3). Reassessment after menstruation or hospital referral is indicated in such women.

**Assessment of symptoms**

**Patient’s history**

Details of risk factors, including family history and current medication, should be obtained and recorded. Knowing the duration of a symptom can be helpful, as cancers usually grow slowly but cysts may appear overnight.

Inspection should take place in a good light with the patient’s arms by her side, above her head, then pressing on her hips.
Table 1.2 Conditions that require hospital referral.

**Lump**
- Any new discrete lump
- New lump in pre-existing nodularity
- Asymmetrical nodularity in a woman over the age of 35
- Asymmetrical nodularity in a younger woman that persists at review after menstruation
- Abscess or breast inflammation that does not settle rapidly after one course of antibiotics
- Palpable axillary mass including an enlarged axillary lymph node

**Pain**
- If associated with a lump
- Intractable pain that interferes with a patient’s lifestyle or sleep and that has failed to respond to reassurance, simple measures such as wearing a well-supporting bra or anti-inflammatory drugs
- Unilateral persistent pain in postmenopausal women that is in the breast rather than in the chest wall (see Chapter 3)

**Nipple discharge**
- All women aged >50
- Women aged ≤50 with either
  - Bloodstained discharge
  - Spontaneous single duct discharge
  - Bilateral discharge sufficient to stain clothes

**Nipple retraction or distortion**

**Nipple eczema**

**Change in skin contour**

**Family history**
Request for assessment of a woman with a strong family history of breast cancer should be to a family cancer genetics clinic.

Table 1.3 Patients who can be managed, at least initially, by their GP.

- Women with bilateral tender, nodular breasts provided that they have no localised abnormality on examination
- Young women (≤35 years) with asymmetrical localised nodularity, these women require assessment after their next menstrual cycle, and if nodularity persists hospital referral is then indicated
- Women with minor and moderate degrees of breast pain who do not have a discrete palpable lesion
- Women aged <50 who have nipple discharge that is small in amount and is from more than one duct and is intermittent (occurs less than twice per week) and is not bloodstained. These patients should be reviewed in 2–3 weeks and if symptom persists hospital referral is indicated.

(Figure 1.3). Skin dimpling or a change in contour is present in up to a quarter of symptomatic patients with breast cancer (Figure 1.4). Although usually associated with an underlying malignancy, skin dimpling can follow surgery or trauma, and can be associated with benign conditions or occur as part of breast involution (Figures 1.5–1.7).

**Breast palpation**
Breast palpation is performed with the patient lying flat with her arms above her head (Figure 1.8), and all the breast tissue is examined using the most sensitive part of the hand, the fingertips. It is important for the woman to have her hands under her head to spread the breast out over the chest wall, because it reduces the depth of breast tissue between your hands.

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*Significant family history is one 1st degree relative with breast cancer ≤50 years of 2 x 1st or 2nd degree relatives with breast cancer <60 years.

*Asymmetrical nodularity indicates that one area of breast feels firmer and more nodular than matching area of the opposite breast.

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Figure 1.2 Management of patient presenting in primary care with a breast lump or localised lumpy area or nodularity.
Symptoms, Assessment and Guidelines for Referral

Figure 1.3 Position for breast inspection. Skin dimpling in lower part of breast evident only when arms are elevated or pectoral muscles contracted.

Figure 1.4 Skin dimpling (left) and change in breast contour (right) associated with underlying breast carcinoma.

Figure 1.5 Skin dimpling visible in both breasts due to breast involution.

Figure 1.6 Skin dimpling after previous breast surgery.

Figure 1.7 Skin dimpling associated with breast infection.

Figure 1.8 Breast palpation.

and the chest wall and makes abnormal areas much easier to detect and define. If an abnormality is identified, it should then be assessed for contour and texture. The presence of deep fixation is checked by tensing the pectoralis major, which is accomplished by asking the patient to press her hands on her hips. All palpable lesions should be measured with calipers. A clear