



Breast cancer: history and examination

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Although breast cancer is a feared and all too common condition, there has been good progress in this diagnosis and treatment so that the vast majority of new breast cancer patients can now expect to live 10 years and beyond. Although it is impossible to be dogmatic, particular clinical scenarios are worth noting and others should ‘ring alarm bells’.

In WA there is good support for breast cancer patients through all stages of their cancer journey, this usually begins with the GP through a valuable ‘health check up’ or response to a patient’s breast symptoms. Many asymptomatic women go to their GP requesting advice and referral for breast screening through either BreastScreen WA or private imaging.

Pointers in the history

Breast assessment involves taking a history that builds a picture of the glandular status of the breasts that helps provide possible causes for the patient’s breast symptoms and signs (see Table 1).

While breast cancer can occur at any age, it is rare in teenagers and young women and is nearly always present in elderly women not taking HRT who present with a lump; 80% of breast cancers occur in women over 50 years of age. (With 0.7–1.0% of all new breast cancers in men, it is important to process all men with breast symptoms through the same pathway as women.)

Following pregnancy and lactation there is a paradoxical degree of breast glandular tissue atrophy. The breasts become fatty, making it easier to detect abnormalities on clinical examination and imaging.

Exogenous hormones in the pre-menopausal and menopausal setting can result in varying symptoms of breast pain, swelling and lumps that are often benign breast cysts.

Any history of a bloody nipple discharge requires breast imaging and cytology (if possible). The majority of cases are due to a retroareola duct papilloma but 10% are due to retroareolar ductal carcinoma in situ (DCIS) which is often ‘occult’ on imaging. Negative cytology does not mean there is no DCIS. Pregnant or lactating women can get an isolated bloody discharge related to rapid duct growth, as well as a duct papilloma or DCIS. All patients need surgical referral.

Examination

It is good to have a clear idea of what you are

looking for during examination (see Table 2). The most helpful positions to examine patients are;

1. sitting on the side of the bed with the hands behind the head and then pushed into the hips (Figs 1a & 1b), and
2. lying with the head of the couch at 45° and the hands behind the head (see Fig 2a).

The examining doctor looks and palpates for both swellings and skin changes bilaterally in three regions; breasts, axillae and supraclavicular regions.

Sitting the patient up with the hands behind the head and inspecting the breasts is a good way of detecting subtle changes compared to lying down.

Breast cancer metastases can present locally as a palpable mass or skin colour change in the breast, axilla, supraclavicular region or on the chest wall after mastectomy.

The significance of findings

Although it is impossible to be dogmatic, particular scenarios are worth noting and others should ring alarm bells.

Significance of skin changes:

- Skin tethering – dimpling or puckering is pathognomonic of underlying cancer.
- Skin and shape – changes in nipple areolar complex can be a retro-areolar cancer.
- Skin colour – purplish to red and a mass is indicative of imminent cancer ulceration.
- Skin oedema and redness – diffuse or local, consider inflammatory cancer.

Table 2: System for Noting Breast Symptoms and Signs

- Site – describe which breast in relation to the clock face.
- Size – how big (mm); increasing or decreasing in relation to menstrual cycle.
- Surface – smooth, poorly defined, mobility (‘flicks’ or is fixed to surrounding tissue).
- Skin changes – tethering, redness, purplish pink colour, oedema, nipple in-drawing.
- Pain – painful/painless, changes with the menstrual cycle.
- Nipple discharge – spontaneous, squeezed, bloody, greenish to yellow, clear.

Suspected inflammatory breast cancers and cancers during pregnancy and lactation need immediate diagnostic work up and breast specialist referral. Beware of the apparent, negative breast imaging results.

Different findings are more prevalent at different ages.

Pre-menopausal:

Small firm breasts; often lumpy due to prominent glandular tissue.

Teenagers and young adults usually have benign fibroadenomas.

Middle age brings more cysts, some fibroadenomas, more atypical proliferative lesions.

Post menopausal:

No HRT, fatty non-hormonally stimulated breasts – most new lesions are cancers.

HRT use, hormonally stimulated breasts with more fibroglandular tissue – some lesions are cysts, some are cancers. ■

Table 1: Breast history

Hormone status of the breast

- Age and menopausal status.
- Parity – the nulliparous breast tends to be more glandular at any age.
- Breast feeding – the breast is less glandular.
- Hormones for contraception and to reduce menstrual flow: oral, implants and coils – can alter glandular tissue.
- HRT (oral, topical, creams) increases glandular tissue.

Previous breast conditions

Family history of breast and ovarian cancer



Fig 1a



Fig 2a



Fig 1b



Fig 2b

■ Fig 1a: Initial inspection; look at the different fall of the breast to detect swellings and tethering; remember to look from the sides.

■ Fig 1b: Sitting, hands pushing into the hips.

■ Fig 2a: Detailed palpation, supine at 45 degrees; to examine the axillae, hold the arm loosely in one hand and examine with the other.

■ Fig 2b: Compare breast shape lying down and sitting; most lumps are easier to palpate with the patient supine. However lumps deep and close to the chest wall are easier to palpate with the patient sitting and leaning slightly forward.



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