

BREAST CANCER

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This is the first of the series of self assessment exercises to be published in 'The Pharmacist'. Each article in the series will cover a different topic of importance to pharmacy practice. The material on Breast Cancer has been prepared by Ms Graziella Sammut, B.Pharm., as a part of her undergraduate thesis.

Read the article and complete the self assessment questions.

If you wish to test your knowledge on the subject matter, you can attempt to answer the questions before you read the article. The answers are on page 55.

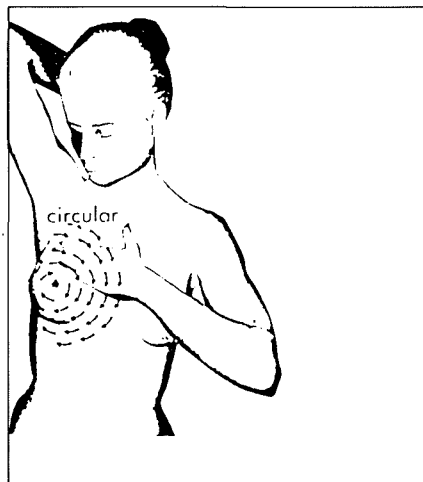
Self Assessment

BREAST CANCER

Which of these statements are true or false:

1. If a woman finds a lump in her breast it is usually too late to successful treatment.
2. Women who are in good health can still get breast cancer.
3. Mammograms can detect breast cancer before any symptoms are noticed.
4. The first symptoms of breast cancer is always a lump in the breast.
5. Women with large breasts are more likely to get breast cancer.
6. Men never get breast cancer.
7. BSE should be performed before menstruation.
8. During BSE, one must press quite hard to be able to feel any lumps in the breast.
9. Older women are more likely to get breast cancer than younger women.
10. Obesity and dietary fat have been associated with risk for breast cancer.

The Normal Breast



The breast is made up of different parts including lobes (glandular milk-secreting tissue), milk ducts and a large amount of fat and supportive tissue. Some parts have a distinct shape and feel. Chest muscles and ribs are found beneath the breast.

Breast, like all body organs, are affected by normal life changes. The breasts are primarily under the influence of ovarian hormones:

during puberty, pregnancy, breast-feeding, each menstrual cycle and at menopause.

As a woman ages, fatty tissue replaces much of the glandular tissue.

Breast texture varies from woman to woman but also in the same woman from week to week and over the years. The size and shape of the breasts depend upon heredity and body weight and do not necessarily match each other.

What is Cancer?

Cancer is a disease characterized by uncontrolled growth and spread of abnormal cells. Normally, the cells that make up all parts of the body reproduce themselves in an orderly manner so that growth occurs, worn out tissues are replaced and injuries repaired.

Occasionally, certain cells grow into a mass of tissue called tumour. Some tumours are benign; others are malignant.

Benign tumours may interfere

with body function and require surgical treatment, but they do not invade neighbouring tissue and seldom threaten life. However, malignant tumours invade and destroy normal tissue. By a process called metastasis, cells break away from a malignant tumour and spread through the blood and lymphatic systems to other parts of the body where they form new colonies of cancer.

Sometimes cancer grows and spreads rapidly; sometimes the process takes years.

What increases risk of breast cancer?

Breast cancer is primarily a disease of women and every woman is at risk as she grows older. There is probably no single cause of the disease. Research has shown that several different factors working together appear to increase the risk of breast cancer. Because of genetic and lifestyle differences, some women are at greater risk than others.

Some of the factors that increase risk are:

- Increasing age.
- History of breast cancer in close family relatives - mother, sister, grandmother, aunt.
- Late age at menopause.
- Onset of menstruation before age 12.
- Older than 30 years at birth of first child.
- Never given birth.
- Obesity - 40% above the normal weight.

Breast cancer does not seem to be associated with hormone use, nor is it related to chemical pollution in the environment.

What are the signs and symptoms of breast cancer?

A lump or thickening is the most frequent warning signal, but the first sign may be a discharge from the nipple. Other signs include scaliness of the skin, especially around the nipple, or any change of colour or texture of the skin.

A sudden or gradual change of any kind that is not related to the menstrual cycle may be significant.

Most women have some differences in the size or shape of their breasts so that important words to remember are "any change from what has always been the normal pattern".

Any kind of 'dimpling' or "puckering" of the skin may be an indication that something inside is pulling.

It is important that the pharmacist refers the client (complaining of breast symptoms), for immediate medical assessment.

The pharmacist should stress to the patient that:

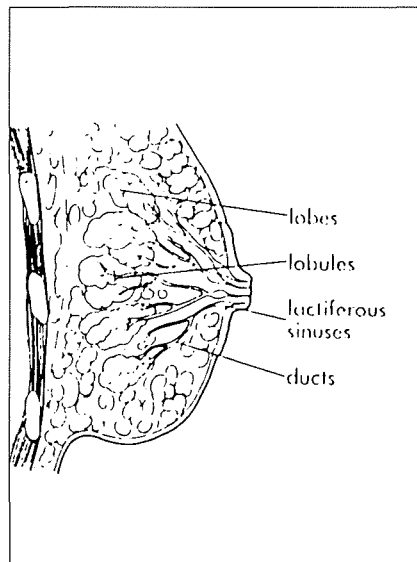
1. An immediate professional examination is of great importance
2. The patient should not continue to push, squeeze or irritate any suspicious area detected during

breast self-examination, until she sees the doctor.

3. 9 of every 10 "symptoms" which suggest a breast abnormality turn out to be harmless, but one should consult the doctor without delay. Most lumps are not cancerous, but only a doctor can tell if there is anything wrong.
4. If it is cancer, then the sooner treatment is started, the greater the possibility of a cure.

Methods of early detection

1. Mammography. This is a very low dose X-ray of the breast which can show whether the breast is in some way abnormal. The test can sometimes be slightly uncomfortable as the breast needs to be flattened as much as possible against the X-ray plate, but the X-ray only takes a few seconds.
2. Clinical Breast Examination. During regular health check ups, every woman should have a clinical breast exam where the physician examines the breasts for lumps or thickenings, changes in contour or consistency, nipple abnormalities and enlarged lymph nodes in the armpit or neck.



3. Breast Self-Examination (BSE) This is safe and without cost to women who practice it. It has the potential for helping more women to find their breast cancer early, than any other method now available and feasible for widespread use.

The American Cancer Society recommends that all women over the age of 20 examine their breasts once a month. Breast self-examination (BSE) is encouraged because breast cancer symptoms can develop and be noticed between clinical breast exams or mammo-graphy.

BSE includes several important components:

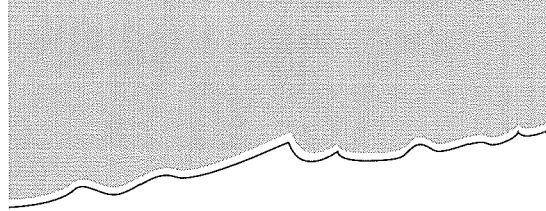
- Regularity – examine at the same time each month.
- Complete coverage – examine all of the breast.
- Use of finger pads – press with top third of fingers.
- Adequate pressure – massage to feel deep breast tissue.

Sometimes the doctor will find a definite lump or other breast problem that needs investigation. If this occurs, the patient is referred to hospital and a biopsy is done. This is a surgical removal, for microscopic examination, of a piece of tissue from the suspected growth or, if small, the entire growth itself. The pathologist will then be able to say definitely whether it is benign or a cancer.

Treatment of breast cancer

The many forms of treatment include surgery, radiotherapy, chemotherapy and hormone therapy used singly and/or in combination.

The approach to therapy mainly depends on the extent of disease when treatment is first started, that is whether it is local, the tumour being confined to the breast and its lymphatics, or disseminated, where distant metastases are present.



Answers to Questions Patients Might Ask

- Q. What are my chances of surviving if I get breast cancer?
- A. Survival depends primarily on the stage of the disease at the time it is detected. If a non-palpable lump is found only by mammography before it is large enough to be felt, the cure rate is nearly 100%.
- Q. Are women with very large breasts more likely to get breast cancer?
- A. No. The size of the breast is not related to the development of breast cancer.
- Q. Am I at increased risk for breast cancer if I have breast cysts?
- A. Only a very small number of women with fibrocystic breasts have a slightly increased risk of developing breast cancer and

those women can be identified by a pathologist's microscopical examination of the breast tissue.

- Q. If a breast lump is painful, is it more likely to be cancer?
- A. As a breast cancer is developing in the breast, it usually does not cause pain. In the early stages of breast cancer, a woman usually is unaware of any symptoms.
- Q. Is the "pill" carcinogenic?
- A. Oral contraceptives have now been widely used for over 15 years. Carcinogenic effects have been looked for in many studies. The evidence so far is that use of the pill is not associated with an increased incidence of carcinoma, but carcinogens in man often have a very long latent period. It is still too early to be sure that no long-term effects of the "pill" will come to light.

- Q. Is breast cancer preventable?
- A. Due to insufficient knowledge, at present it is impossible to actually prevent breast cancer. It would seem sensible then to detect breast cancer at its earliest by proper detection methods.

References

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