

CANSA Breast Cancer Position Statement

Background

Breast cancer is the leading cancer in women worldwide, with an increase in developing countries due to an increase in life expectancy. According to the International Agency for Research in Cancer (IARC) Globocan Report, 1,3 million women were diagnosed with breast cancer and 458,367 women died worldwide in 2008.

Apart from non-melanoma skin cancer, breast cancer is the most common cancer in women of all races and ethnicities.

In South Africa the lifetime risk for breast cancer in women is 1 in 29 according to the 2001 National Cancer Registry.

Breast cancer in males

Male breast cancer is rare accounting for 1% of all breast cancers.

It is 100 times more common in women which is 1 in 1,000 men and occurs from the 60 years of age. Breast cancers are a hundred times more common in women than in men. According to the 2001 South African National Cancer Registry men have a lifetime risk of one in 928 to develop breast cancer.

Recent research found that men with a faulty BRCA2 gene (which is related to female breast cancer as well), have a one in twelve chance of developing breast cancer before the age of eighty years.

Breast cancer detection in South Africa

Breast self examination (BSE) and clinical breast examination (CBE) are the two important routine detection methods that facilitates early diagnosis. These two modalities are not diagnostic but enables further investigation if a lump is detectable. Most breast lumps are benign (non-cancerous) but needs full investigation.

Ultrasound is mainly utilised as an adjunct to mammography in persons with dense breasts and to guide fine needle biopsies (FNB).

If facilities are available, screening by mammography alone, with or without physical examination of the breasts, plus follow-up of individuals with positive or suspicious findings, will reduce mortality from breast cancer by up to one-third among women aged 50–69 years. Much of the benefit is obtained by screening once every two to three years.

Mammography and Ultrasound

Developed specifically for breast tissue radiography, mammography is used as a diagnostic as well as a clinical diagnostic tool for symptomatic persons. The imaging system for mammography is adapted in order for the lowest radiation dose possible. The efficacy of mammography depends on the technical quality and the expertise of the radiologist that interpret the it.

Mammography screening should thus be done in institutions where effective evidence of screening has been proven. An ultrasound is often used in addition to mammogram for dense breast tissue as it produces sharp, high contrast images.

CANSA advocates a mammogram every 3 years from age 35 for non-symptomatic breast screening. The scientific evidence regarding over-exposure to radiation with too frequent mammograms in early detection has not yet been established and should be approached with the precautionary principle.

Emerging techniques in breast imaging

The following techniques have been assessed by IARC for potential strengths and limitations as indicated below:

Digital mammography – lower dose radiation but higher in cost than mammography

Infrared thermography – is the measurement of light emissions, is less sensitive and specific than mammography, no harmful radiation

Transillumination(near infrared spectroscopy light scanning) – technique for scanning the breast with red or near infrared light and recording the light image on infrared sensitive film with a television camera, is less sensitive and specific than mammography, no harmful radiation

The SureTouch breast screening tool

Explored and verified by CANSA, the SureTouch screening device is affordable and small enough to be secured in CANSA's mobile health clinics that travel through urban, semi-urban and rural communities across the country. It is CANSA's aim to equip each of its six mobile health clinics with this effective and affordable SureTouch screening tool, thereby increasing the accessibility and quality of breast cancer screening services to all women in South Africa.

Benefits of the SureTouch device include:

- Sensitive and accurate: The probe houses tactile sensors up to four times as sensitive to human touch and is clinically proven to accurately map lesions as small as 5mm.
- Real time palpation: Simply palpate suspicious breast lesions and receive instant images of surface stress patterns.
- Objective, reproducible record: Palpation images are reproducible by different examiners, eliminating the subjective nature of a clinical breast exam.
- Saves time: Prints an objective electronic record in seconds.
- Non-invasive and comfortable: Uses a sterile disposable cover and non-toxic, non-irritating lubricant to glide over target areas.
- Pain- and radiation free computerised breast imaging: The procedure is

totally non-invasive, requires no compression of the breast tissue and uses no harmful radiation to create an image.

The Donna Glove

The Donna glove is the first breast lump detection glove in the world. It has been clinically tested and can detect very small lumps, it is safe, effective, has no side effects making Breast Self Examination (BSE) at home easy. CANSA has endorsed the Donna Glove as a Smart Choice.

CANSA Lymphoedema Clinics

Lymphoedema is a challenging complication of cancer surgery or radiation therapy and is called secondary lymphoedema (occurs at birth due to dysphasia is called primary oedema). It is a common side effect of treatment for women's cancers. It is the accumulation of fluid due to inactive or damaged lymph glands. CANSA launched lymphoedema clinics as part of the women's health campaign in 2008. The aim is to provide clinics countrywide to address the acute shortage of lymphoedema services.

References:

1. Ferlay J, Shin HR, Bray F, Forman D, Mathers C and Parkin DM. GLOBOCAN 2008, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 10 [Internet]. Lyon, France: International Agency for Research on Cancer; 2010. Available from: <http://globocan.iarc.fr>
2. DGR Evans, I Susnerwala, J Dawson, E Woodward, E R Maher, F Lalloo Risk of breast cancer in male *BRCA2* carriers: *J Med Genet jmg.2009.075176* Published Online First: 28 June 2010
3. J P Apffelstaedt, V Steenkamp, K Baatjes Performance data of screening mammography at a dedicated breast health centre South African Medical Journal December 2008, Vol. 98, No. 12