Breast Cancer

The breast is made up of glands called lobules that can make milk and thin tubes called ducts that carry the milk from the lobules to the nipple. Breast tissue also contains fat and connective tissue, lymph nodes, and blood vessels. Breast cancer develops when overactive cells have grown uncontrollably to create diseased tissue. Cancer can form either in the breast tissue, primarily in the milk ducts (ductal carcinoma) or glands (lobular carcinoma). Ductal carcinoma in situ is a condition in which abnormal cells are found in the lining of the ducts but they haven't spread outside the duct. If a lump is found, it might be benign (non -cancerous) but it is critically important to biopsy the growth to confirm whether the tumor is malignant(cancerous). A cancer can travel through the breast tissue to other parts of the breast and possibly metastasize by traveling through the bloodstream and lymphatic system to other parts of the body.

In South Africa breast cancer is the leading cancer in women of all races, with a lifetime risk of 1 in 26 in South Africa, according to the 2012 National Cancer Registry (NCR). Breast cancer can also occur in men, it is rare and tends to behave a bit more aggressively.

The type of breast cancer is determined by site of the original tumor and its cellular make-up. Different types of breast tumors grow and spread at different rates — some take years to spread beyond the breast while others grow and spread quickly.

Hormones & Breast Cancer

Oestrogen and progesterone receptors are structures present on the surface of some cancer cells. These structures allow the female hormones oestrogen and progesterone to enter the cells and encourage them to grow. Tumours that test positive for these structures are called hormone receptor-positive and might be successfully treated with hormonal therapy (e.g., tamoxifen or aromatase inhibitors) These treatments prevent oestrogen from attaching to receptors on breast cancer cells. As a result, oestrogen cannot get in the cells, and tumour growth is slowed. The treatments also reduce the amount of hormones circulating in the body that attach to oestrogen or progesterone receptors. By blocking hormones, the treatments deprive tumour cells of the substances they need to grow.HER2-positive breast cancers are breast tumours that make too much of a substance called HER2/neu, which speeds the growth of cancer cells. About 20 percent of breast cancers are HER2positive. Drugs that target HER2/neu slow the growth of the tumour. Such drugs include trastuzumab (Herceptin) and Iapatinib (Tykerb). The breast cancer will be tested to identify if it is HER2-positive to determine the best treatment options. Triple-negative breast tumours do not depend on oestrogen,

progesterone, or HER2 for their growth, and account for about 15 percent of all breast cancers. The standard treatments include surgery, radiation and chemotherapy. Researchers are looking for new ways to combine chemotherapy and targeted drugs to offer the most benefit to those living with triple-negative breast cancer.

Our care is from diagnosis to treatment and recovery with the belief that compassion and mutual respect are essential for success in all the dimensions of cancer care. Dr. Ngidi follows a multi-disciplinary approach to treatment and partners with each patient encouraging them to participate in their own medical care and make informed decisions.

Common Symptoms

Some times in the early stage there may be no symptoms

- Persistent lump breast, armpit
- Swelling of the arm pit
- Breast pain or tenderness
- Flattening or indentation on breast
- Changes to the breast: size, contour, texture or temperature
- Changes to the nipple: retraction, dimpling, itching, or ulceration
- Unusual discharge from the nipple

In inflammatory breast cancer the breast becomes swollen, red and feels warm because the cancer cells block the lymph vessels in the skin.

If any of these symptoms occur, the first step is taking a biopsy of the growth. This will confirm whether a tumor is malignant or not. If the tumor is cancerous, additional tests are done to determine if the cancer has spread beyond the breast(staging) and its response to different treatments. If the cancer is diagnosed at an early stage, an effective treatment plan could be developed; however, malignant tumors are usually discovered at a later stage of development when the symptoms are pronounced.

Prevention

Preventative actions against breast cancer can be taken. Well-known precautions include scheduling regular mammogram screenings and knowing the disease's risk factors. <u>Breast self-examination</u> is another important preventative measure. Periodic self-examinations develops self-awareness and sensitivity to any irregular physical changes.

Risk Factors

Odds of developing breast cancer can increase if a woman has any of the following risk factors:

- Age
- Never had children

- History of radiation to the chest area
- Family history (especially mother, sister, daughter) of ovarian and/or breast cancer
- Began menopause after age 55
- Hormone therapy after menopause
- Previous abnormal breast biopsy results
- Obesity or weight gain after menopause
- Lifestyle factors smoking, alcohol
- Diet high in saturated fats
- Oral contraceptive use (birth control pills)
- Insufficient exercise

If a woman has any of the risk factors then preventative action can be taken. In instances where breast cancer has occurred in the family, genetic testing can be considered.

Factors that reduce the risk breast cancer

Breast feeding - especially if you breast feed for a year or more Exercise & weight control - research shows a link between exercising regularly at a moderate or intense level for 4 to 7 hours per week and a lower risk of breast cancer.

Mammogram Screenings

Mammograms have become the primary method for breast cancer screening. However, other exams including MRIs and genetic testing are taken depending on a woman's individual and family history.

Treatment for Breast Tumors

Treatment options are determined by the stage and type of breast cancer. It is critical that we first discuss all treatment options as well as possible side effects.

Treatment can include one, and possibly a combination, of the following:

- Chemotherapy
- Novel targeted therapies
- Radiation therapy
- Surgery

Hormone therapy

When developing a treatment plan, we evaluate the stage and grade of the tumor, previous treatments (if any), extent of the cancer, biopsy results, and other unique factors. We develop the most effective multi-modal treatment plans for our patients with the collaboration of pathologists, surgeons, radiologists, and plastic surgeons.

Dr Ngidi believes in holistic integrated care. Your referring physician is updated of your cancer status and management plan from the beginning and at completion. This assists in streamlining your care.

Quotes:

The true warrior isn't immune to fear. She fights in spite of it. Francesca Lia Block

"She made broken look beautiful and strong look invincible. She walked with the Universe on her shoulders and made it look like a pair of wings."-Ariana Dancu

She was her own promised land. Mark Anthony

You are not broken, you are breaking through. Alex Myles





