Good essay on breast cancer

Technology, Development



Breast cancer is the most common type of cancer found in women, second only to melanoma. Although breast cancer occurs in both men and women it is far more frequently diagnosed in women. Increased awareness and support for breast cancer on a community and national level as improved the ability to detect breast cancer early, and to diagnose type of cancer accurately and quickly has led to new treatments and increased survival rates.

Background Information

Breast cancer is a type of malignancy that begins in the breast tissue. There are two primary kinds of breast cancer. The first, called ductal carcinoma, forms in the ducts that allow milk to travel from the breast where it is produced to the nipple. The majority of breast cancers fall in this category. The second type of breast cancer, called lobular carcinoma, start in the lobes or lobules of the breast which are where the milk is actually produced. In very rare cased breast cancer may be based in other areas of the breast (Mayo Clinic Starr, 2014).

Symptoms of Breast Cancer

According to the American Cancer Society, while the early stage of breast cancer usually doesn't cause any symptoms, as the cancer progresses symptoms can include:

- Breast swelling
- Irritation or irregular appear of skin over the breast areas
- Pain anywhere in the breast including the nipple
- Change in the appearance of the nipple such as redness, scaliness, or

thickening of the skin

- Discharge from the nipple that is not breast milk
- A lump under the arm

Since the early stages of breast cancer can go undetected it is important for women to conduct regular self-breast exams.

Risk Factors

According to Cuzick, DeCensi, & Arun (2011), risk factors for breast cancer include:

- Age and gender The majority of cases of breast cancer occur in women over the age of 50.
- Family history of breast cancer Those with a first degree relative who has had breast, uterine, ovarian, or colon cancer have an increased risk of developing the disease. About 20 30% of women who develop breast cancer have a family history specific for breast cancer.
- Genes Genetic mutations have been linked to an increased risk for breast cancer. Mutations have been identified in the BRCA1 and BRCA2 gene which produce protein that protect against cancer. When one of these mutations exist, there is an 80% chance of developing breast cancer.
- Menstrual cycle Early onset of menstruation (before age 12) or late onset of menopause (after age 55) has been associated with an increased risk of developing breast cancer.
- Childbirth Those who have never given birth or who have had children after age 30 are at increased risk of developing the disease.
- Hormone replacement therapy (HRT) Women who have received hormone

replacement therapy with estrogen for more than two years are more likely to develop cancer.

Treatments for Breast Cancer

Treatment for breast cancer depends on the type of cancer and how far it has spread. Surgical options include lumpectomy which removes just the lump and area immediately around it, and mastectomy which involves removal of one or both breasts. Following surgery, radiation or chemotherapy are often used to prevent relapse and kill any cancer cells the surgery may not have removed. Radiation may also be used prior to surgery to shrink the size of tumors and make surgery easier or when there is no spread, to salvage more of the breast tissue. Adjunctive chemotherapy may be used prior to radiation to kill stray cells that may have traveled away from the primary cancer site. Since estrogen leads to cell proliferation, including proliferation of cells that are malignant, hormonal therapy focuses on decreasing the amount of estrogen in the body and blocking the effects of estrogen on cancer cells (American Cancer Society, 2014). Hormone therapy is used for cases that involve cancer cells that are sensitive to estrogen. This therapy is recommended no matter what stage the cancer is in, due to the known effects of estrogen on proliferation of cells. New treatments are currently being developed that cause the immune system to constantly produce immune factors that will recognize and attack any cancer cells should they be detected. This treatment idea is revolutionary since usually cancer must have been detected either in the initial disease or during relapse before treatment was initiated. This treatment aims at preventing cancer from reoccurring by wiping out any cell detected before it can

produce other malignant cells or mutate into a form that is resistant to treatment.

Prognosis

The prognosis for breast cancer has improved significantly in recent years due to better diagnostic methods and improved treatment options. Based on five year survival rates, for those you have cancer that has not spread to the lymph nodes the survival rate is 98%. Even when the cancer has spread to the lymph nodes, the five year survival rate is 84%. For those who have metastasis or when the cancer has spread to other areas of the body such as the lungs, liver or the bones the five year survival rate is 27%. While the mortality rate for breast cancer has decreased by 25% since 1990, survivors often have fear and anxiety related to the potential of relapse and long term complications related to treatment. However, with support from friends and family, and psychological therapy to aid in adjustment, breast cancer survivors can live long, healthy, happy and productive lives (Mayo Clinic Staff, 2014).

References

American Cancer Society. (2014). Breast Cancer. Retrieved from http://www.cancer.org/cancer/breastcancer/

Cuzick J, DeCensi A, Arun B, (2011). Preventive therapy for breast cancer: a consensus

statement. Lancet Oncology, 12(5): 496-503.

Mayo Clinic Staff. (2014). Diseases and conditions: Breast cancer. Retrieved from

http://www. mayoclinic.

org/diseases-conditions/breast-cancer/basics/definition/con-20029275