

# Sister 2 Sister

*"A Feminine touch of Progress"*

NPMHU Local 300 Women's Caucus Editor: Lucy Lombardo

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## History of Breast Cancer

Breast cancer is the most common cancer in women around the world. It has been widely studied throughout history. It has been mentioned in almost every period of recorded history. Because of the visible symptoms especially at later stages the lumps that progress to tumors have been recorded by physicians from early times. This, unlike other internal cancers, breast lumps tend to manifest themselves as visible tumors. It was a matter of taboo and embarrassment that meant detection and diagnosis was rare. The mention of breast cancers in literature beyond medical journals and books was rare.

Ancient Egyptians were the first to note the disease more than 3,500 years ago. One of the descriptions refers to bulging tumors of the breast that has no cure. In ancient Greece, people made offerings in the shape of a breast to the god of medicine. And Hippocrates described the stages of breast cancer in the early 400s B.C.E. He suggested that cancer was caused by the excess of black bile. In appearance of the breast cancer too black, hard tumors are seen that burst forth if left untreated to yield a black fluid. He named the cancer *karkinos*, a Greek word for "crab," because the tumors seemed to have tentacles, like the legs of a crab. In 200 A.D., Galen described the cancer as well. He also suggested excessive black bile but, unlike Hippocrates, he postulated that some tumors were more dangerous than others. He suggested medications like opium, castor oil, licorice, sulphur, salves etc. for medicinal therapy of the breast cancers.

In 1680, French physician Francois de la Boe Sylvius began to challenge the humoral theory of cancer. He suggested it came from a chemical process that transformed lymphatic fluids from acidic to acrid. In 1730s, Paris physician Claude-Deshais Gendron also rejected the systemic theory of Galen and said that cancer developed when nerve and glandular tissue mixed with lymph vessels. Other theories included pus-filled inflammations in the breast, depressive mental disorders, blaming childlessness, and yet others blaming sedentary lifestyle. It was in 1757 when Henri Le Dran, a leading French physician suggested that surgical removal of the tumor could help treat breast cancer, as long as infected lymph nodes of the armpits were removed.

By mid-nineteenth century, surgery was the available option for breast cancer. The development of antiseptic, anesthesia and blood transfusion during this time also made survival after a surgery more possible.

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William Halstead of New York made radical breast surgery the gold standard for the next 100 years. He developed radical mastectomy that removed breast, axillary nodes (nodes in the armpits), and both chest muscles in a single en bloc procedure or in a single piece to prevent spread of the cancer while removing each of these individually. Although radical mastectomy helped women survive longer, especially if performed early, many women did not choose it since it left them disfigured. In addition there were problems like a deformed chest wall, lymphedema or swelling in the arm due to lymph node removal and pain.

In 1895, Scottish surgeon George Beatson discovered that removing the ovaries from one of his patients shrank her breast tumor. As this caught on, many surgeons began removing both ovaries and performing a radical mastectomy for breast cancers. This reduction of the tumor after removal of the ovaries was due to the fact that estrogen from ovaries helped in growth of the tumor and their removal helped reduce the size of the tumor. What came next was that in these women without ovaries, estrogen was produced by the adrenal glands. In 1952 Charles Huggins began removing a woman's adrenal gland in an effort to starve the tumor of estrogen.

Breast cancer treatment is becoming more personalized as doctors learn more about the disease. It's now seen as a disease with subtypes that have different patterns and ways of acting on the body. The ability to isolate specific genes and classify breast cancer is the beginning of more tailored treatment options. Special tests can also tell doctors more about breast cancer. For example, the Oncotype DX test can examine a part of the tumor to find out which genes are active in it. Doctors can use information about this group of genes to predict how a person's cancer will respond to different treatments. Doctors can then decide on the best course of treatment for that person. With advent of modern medicine, by 1995, less than 10 percent of breast cancer-inflicted women had a mastectomy. This time also saw the development of novel therapies for breast cancer including hormone treatments, surgeries and biological therapies. Mammography was also developed for early detection of the cancers. Scientists then isolated the genes that cause breast cancer: BRCA 1, BRCA2 and ATM. Involvement of more women and actively bringing out the disease into the open is a recent phenomenon that is around three or four decades old. In the 1990's the symbol of breast cancer - the pink ribbon - brought out a revolution against this cancer.

**Early detection and treatment is still considered the best line of defense against breast cancer.**

Submitted by: Lucy Lombardo

## **Breast cancer research milestones**

**1882:** William Halsted performed the first radical mastectomy. This surgery will remain the standard operation to treat breast cancer until into the 20<sup>th</sup> century.

**1895:** The first X-ray is taken. Eventually, low-dose X-rays called mammograms will be used to detect breast cancer.

**1898:** Marie and Pierre Curie discover the radioactive elements radium and polonium. Shortly after, radium is used in cancer treatment.

**1932:** A new approach to the mastectomy is developed. The surgical procedure is not as disfiguring and becomes the new standard.

**1937:** Radiation therapy is used in addition to surgery to spare the breast. After removing the tumor, needles with radium are placed in the breast and near lymph nodes.

**1978:** The drug tamoxifen is approved by the Food and Drug Administration (FDA) for use in breast cancer treatment. Tamoxifen is an antiestrogen drug originally developed for birth control. It's the first in a new class of drugs called selective estrogen receptor modulators (SERMs) used against cancer.

**1984:** Researchers discover a new gene in rats. The human version, called HER2, was found to be linked with more aggressive breast cancer when overexpressed. This cancer is called HER2-positive breast cancer and is not as responsive to treatments.

**1985:** Researchers discover that women with early-stage breast cancer who were treated with a lumpectomy and radiation have similar survival rates to women treated with only a mastectomy.

**1986:** Scientists figure out how to clone the HER2 gene.

**1995:** Scientists can clone the tumor suppressor genes BRCA1 and BRCA2. Inherited mutations in these genes can predict an increased risk of breast cancer.

**1996:** FDA approves anastrozole as a treatment for breast cancer. This drug blocks the production of estrogen.

**1998:** Tamoxifen is found to decrease the risk of developing breast cancer in at-risk women by 50 percent [Trusted Source](#). It's now approved by the FDA for use as a preventive therapy.

Trastuzumab, a drug used to target cancer cells over-producing HER2, is also approved by the FDA.

**2006:** The drug raloxifene is found to reduce breast cancer risk for postmenopausal women who have higher risk. The drug has a lower chance of serious side effects when compared with tamoxifen.

## **Ways You Can Actually Help Someone Dealing With Cancer**

A cancer diagnosis can be devastating, regardless of the outlook. The news can also be hard on friends and family, as they struggle to figure out what they can do to help a loved one after the diagnosis. Here are a few tips from experts and those who dealt with cancer firsthand on ways you can support a loved one living with illness:

### **Celebrate the wins along the way**

Cancer can be an emotional rollercoaster that includes waiting for test results, extensive side effects from particular treatments and possibly going through a multitude of surgeries. Erika Hauer, a breast cancer survivor based in New Jersey and brand ambassador for the cancer support website Humanly, said that celebrating little victories can make the process more bearable.

### **Volunteer for specific tasks**

Jann Fujimoto, a speech-language pathologist in Oconomowoc, Wisconsin, who is undergoing breast cancer treatment, said having friends and family step up to tackle various tasks for her helped keep her mind at ease.

Make specific overtures, "such as offering to drive to chemo (or other medical appointments), take over family carpool responsibilities, organize meals coming to the house, host extra playdates/sleepovers for children," she said.

And if you offer assistance, make sure of your the availability to follow through without undue effort. It's important that the person you're helping "doesn't feel as if they are inconveniencing you," said Danielle T. Calvano, a breast program clinical navigator at White Plains Hospital Center for Cancer Care in New York.

### **Don't walk on eggshells**

The last thing most people living with cancer want to deal with is someone treating them like they should be kept in a bubble.

Therefore, it's vital to continue to engage with them as you did before their diagnosis.

"Try to keep our relationship as normal as possible," said Roberta Luna, a 16-year-pancreatic cancer survivor who advocates for the Pancreatic Cancer Action Network (PANCAN).

She said that when going through her treatment, she appreciated when friends and family continued to joke with and even challenge her at times. "It's okay to get mad at me for something not cancer-related. Be honest with me. Share how you feel. It's important to me to have as normal a life as possible. I don't want to think about cancer 24/7," she said.

Jules Cohen, a medical oncologist at the Stony Brook University Cancer Center in New York and a clinical associate professor of medicine at the school, said to continue to do normal, fun, everyday things with patients "because life goes on even with a cancer diagnosis or during chemotherapy or after a grim prognosis."

### **Don't underestimate a comforting gesture**

A little hug can really lift someone's spirits and your loved one will likely welcome an endearing physical embrace.

"Look me in the eye, hold my hand, give me a hug. Cancer is not contagious, you won't 'catch it' if you look at me or touch me. Hugs, handholding can be very comforting," Luna said.

### **Encourage healthy habits**

Many people living with cancer may feel the need to avoid food or drink due to nausea or other side effects from chemotherapy, said Raanan Berger, director of the oncology division at the Sheba Medical Center in Israel and a cancer expert with *Belong.life*, a social network for cancer patients, caregivers and health care professionals.

"Help them out by making sure that they have easily accessible favorite foods and gently remind them to keep sipping fluids even when they're feeling nauseous," Berger said.

Melissa Berry, founder of the lifestyle site *Cancer Fashionista*, suggested offering to make someone a warm, soothing meal such as a hearty soup or stew. "There is nothing better than a home cooked meal," she said.

And if you are bringing meals to a person with cancer, be sure to take the food in containers that do not have to be returned, Fujimoto said. "It is a great support to receive meals but it can be a little stressful trying to figure out how the dishes will be returned to the giver of the food."

### **Accompany them to their appointments**

It's not uncommon for those living with cancer to only remember 50 percent of what their doctor has relayed to them during an oncology appointment. Therefore, accompanying them to a medical office and being their eyes and ears in the meeting can go a long way in helping to make sure that they fully understand what their doctor is telling them.

"For newly diagnosed or those who are going to an appointment after a scan, ask them if they need someone to go with them," said Marlon Saria, an advanced practice nurse researcher and assistant professor at the John Wayne Cancer Institute at Providence Saint John's Health Center in Santa Monica, California. "You can not only help absorb the information being conveyed by the providers, you can also retain information about support services that are available to address their needs."

Saria added that it can be helpful for a significant other, family member, friend or colleague to take the lead on organizing any pamphlets, brochures, business cards and phone numbers that a doctor hands out during an appointment. "You can help [the patient] to sort it out after the fog settles," Saria said.

### **Don't be afraid to bring a little humor**

As the saying goes, laughter really is the best medicine. A fun way to relieve someone from the stressors of treatments and doctors' appointments is to find some new movies to screen for them, said Heidi Floyd, a breast cancer survivor and an awareness ambassador for Wacoal, a lingerie company that has a current campaign to raise money for the Susan G. Komen breast cancer foundation. "And make them funny!" she added, noting that it's a nice escape for an hour or two.

### **Don't be a know it all**

Cohen said it's important to refrain from sharing "all you 'know' about cancer and cancer treatments, how pharmaceutical companies are trying to rip you off, how doctors don't know anything, how you're better off getting herbal, alternative medicines than chemotherapy, which damages the good cells as well as bad."

Cohen stressed that it's hard enough for patients to deal with a diagnosis and come to grips with the treatment they might need to go through without such input. "They don't need their friend, relative, coworker to muddy the waters by giving them their two cents, no matter how well-intentioned," he said.

Instead, offer to be a listening ear to what they're thinking, feeling and going through. And do so without judgment and on the person's own terms, said Sandy Southerland, a clinical nurse navigator at Hoag Family Cancer Institute in Newport Beach, California.

"Everyone processes the news of a cancer diagnosis differently," Southerland said. "Some people want to be treated the same — talk about the same old things, and not focus on how they are sick. Others may want to talk about all the new developments and types of treatment they are receiving every step of the way. And some people will also transition from being open to private at various times. You just go with the flow and support how they feel in that moment."

Submitted by: Sediqa Perry

### **Once A Month**

Adult women of all ages are encouraged to perform breast self-exams at least once a month.

#### **1) In the Shower**

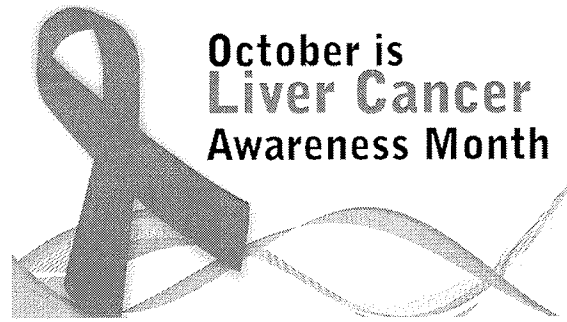
Using the pads of your fingers, move around your entire breast in a circular pattern moving from the outside to the center, checking the entire breast and armpit area. Check both breasts each month feeling for any lump, thickening, or hardened knot. Notice any changes and get lumps evaluated by your healthcare provider.

#### **2) In Front of a Mirror**

Visually inspect your breasts with your arms at your sides. Next, raise your arms high overhead. Look for any changes in the contour, any swelling, or dimpling of the skin, or changes in the nipples. Next, rest your palms on your hips and press firmly to flex your chest muscles. Left and right breasts will not exactly match—few women's breasts do, so look for any dimpling, puckering, or changes, particularly on one side.

#### **3) Lying Down**

When lying down, the breast tissue spreads out evenly along the chest wall. Place a pillow under your right shoulder and your right arm behind your head. Using your left hand, move the pads of your fingers around your right breast gently in small circular motions covering the entire breast area and armpit. Use light, medium, and firm pressure. Squeeze the nipple; check for discharge and lumps. Repeat these steps for your left breast.



October brings liver cancer into focus to increase understanding of the disease including its prevalence, approaches to screening and prevention, and treatment options.

The liver is the second most important organ in your body and is located under your rib cage on the right side. It weighs about three pounds and is shaped like a football that is flat on one side.

The liver performs many jobs in your body. It processes what you eat and drink into energy and nutrients that it stores for your body to use. The liver also removes harmful substances from your blood.

#### **What is liver cancer?**

Liver cancer, also known as hepatic cancer, is a cancer which starts in the liver, rather than migrating to the liver from another organ or section of the body. In other words, it is a primary liver cancer.

About 30,000 Americans are diagnosed with primary liver cancer each year. Primary liver cancer is one of the cancers on the rise in the United States. Primary liver cancer is about twice as common in men than in women.

#### **Causes and Symptoms of Liver Cancer**

##### **What causes liver cancer?**

There are several risk factors for liver cancer:

- Long-term hepatitis B and hepatitis C infection are linked to liver cancer because they often lead to cirrhosis. Hepatitis B can lead to liver cancer without cirrhosis.
- Excessive alcohol use.
- Obesity and diabetes are closely associated with a type of liver abnormality called nonalcoholic fatty liver disease (NAFLD) that may increase the risk of liver cancer, especially in those who drink heavily or have viral hepatitis.
- Certain inherited metabolic diseases.
- Environmental exposure to aflatoxins.

##### **What are the symptoms of liver cancer?**

Symptoms may include fatigue, bloating, pain on the right side of the upper abdomen or back and shoulder, nausea, loss of appetite, feelings of fullness, weight loss, weakness, fever, and jaundice (yellowing of the eyes and the skin).

#### **How is liver cancer diagnosed?**

A physical examination or imaging tests may suggest liver cancer. To confirm a diagnosis, doctors may use blood tests, ultrasound tests, computed tomography (CT) scans, magnetic resonance imaging (MRI), and angiograms. Your doctor may also need to do a liver biopsy. During a biopsy, a small piece of liver tissue is removed and studied in the lab

#### **Liver Cancer Treatment Options**

##### **Treatment options if the cancer has not spread and the rest of the liver is healthy are:**

- Transplant If the cancer has not spread, for some patients a liver transplant (replacement of the liver) may be an option.
- Surgery If the cancer has been found early and the rest of the liver is healthy, doctors may perform surgery to remove the tumor from the liver (partial hepatectomy).
- Radiofrequency Ablation Radiofrequency ablation uses a special probe to destroy cancer cells with heat.

Other treatment options if surgery and transplant are not possible include:

For cancer that has not spread outside the liver:

- Cryosurgery uses a metal probe to freeze and destroy cancer cells.
- Bland embolization or chemoembolization are procedures in which the blood supply to the tumor is blocked, after giving anticancer drugs (chemoembolization) and one without (bland embolization). Both are given in blood vessels near the tumor.
- Radiation therapy Radiation therapy uses radiation (high-energy x-rays) to destroy cancer cells.

**For cancer that has spread outside the liver:**

- Oral medication is available for use in some cases of hepatocellular carcinoma (the most common type of primary liver cancer).
- Clinical trials may be an option for some patients.
- Talk to your doctor about other options that may be available.

##### **What is the outlook for patients with liver cancer?**

A successful liver transplant will effectively cure liver cancer, but it is an option for only a small percentage of patients. Surgical resections are successful in only about one out of three cases. However, scientists are experimenting with several promising new drugs and therapies that could help prolong the lives of people with liver cancer.

**Women Caucus Committee members: Chairwoman: Lucy Lombardo Members: Shirley Ramos, Michelle Kimber-Sadler, Atika Muhammad, Tomiko Utley and Sediqua Perry**