INTRODUCTION

October traditionally sets the pace for breast cancer activities throughout the world. The Editor of this journal, its origin having been in prosthetic research, has selected this issue to showcase breast cancer awareness, discussing treatment, prosthetic options, and quality-of-life issues. I am humbled to have been selected as the guest editor of this journal.

The solitary pink ribbon with a gold heart symbolizes that education and empowerment are the keys to help women understand that they have a major risk of being diagnosed with breast cancer in their lifetime, including those 212,000 women currently serving in our armed forces.

As a member of a multidisciplinary team at the Ellen H. Lazar Shoppe On Fifth, The Cancer Center at Hackensack University Medical Center, Hackensack, New Jersey [1], I consult with individuals who are exploring the surgical options of those women diagnosed with breast cancer and the impact this decision will have on their physical and psychological path [2]. As a Certified Mastectomy Fitter (CMF) (person specially trained in selecting and fitting women for breast prostheses), I hope to communicate the significant importance that a CMF can have in a patient’s follow-up care, especially if the patient has a disability.

BREAST CANCER STATISTICS

According to the National Cancer Institute data, breast cancer is the most common cancer among women, except for certain skin cancers. In 2005, approximately 211,240 women in the United States will be diagnosed with invasive breast cancer and more than 40,000 women will have died from it. In addition to invasive breast cancer, 58,490 new cases of in situ breast cancer will be diagnosed [3–4].

Breast cancer also occurs in men. Although this article addresses a woman’s perspective, how many men check their breasts for cancer? An estimated 1,690 men will be diagnosed with breast cancer and 470 men will die from it in 2005. As in women, outcome in men is influenced by tumor size, extent of metastasis, and lymph node involvement [3,5]. Men’s family history plays a strong role because about 20 percent of men have a close female relative who has had the disease. If treatment begins at the same stage, breast cancer survival rates of men are similar to those of women [3,5].

BREAST CANCER DETECTION

A woman’s breasts change throughout her life. Age, menstrual cycle, pregnancy, breast feeding, birth control and/or other hormonal therapies, trauma, and menopause can contribute to these changes. Since most breast lumps are found by the women themselves, all should learn how to examine their breasts and perform a monthly breast self-examination (BSE). Proper BSEs will ensure that changes in the breasts can be detected early. Such changes in breast tissue include—

- Lump.
- Skin dimpling.
- Change in skin color or texture.
- Change in how the nipple looks, i.e., nipple retraction.
• Clear or bloody discharge from the nipple.

BSE is just one component of breast health; mammography and routine physical examination of the breasts by a trained health professional are also important. A woman with a family history of breast cancer is recommended to begin having mammograms 10 years before the age at which her family member was first diagnosed [4].

BREAST CANCER DIAGNOSIS, TREATMENT, AND COUNSELING

When breast cancer is found and treated early, a woman has more treatment choices and a good chance of complete recovery. Treatment for women with breast cancer differs by institution. Many institutions have developed specific practice guidelines for surgical therapy, adjuvant postlumpectomy radiation therapy, adjuvant postmastectomy radiation therapy, adjuvant chemotherapy, and adjuvant hormonal therapy [6]. Discussion and analysis of treatment options will differ from surgeon to surgeon. The most important part of selecting an option is understanding and feeling comfortable with it.

Specialized genetic counseling not only may affect but also may save the life of a person with a maternal history of breast cancer. Five to ten percent of breast cancer is thought to be a familial mutation. Two dominant inherited genes are BRCA-1 or BRCA-2. An individual who is born with a mutation on the BRCA-1 or BRCA-2 gene has a 50 to 85 percent risk of developing breast cancer during her lifetime [7]. The National Institute of Environmental Health Sciences at the National Institutes of Health is sponsoring a study called The Sister Study that is investigating how the environment and genes affect breast cancer risk. The Sister Study is seeking participation of women to help researchers learn how our environment and genes affect our chances of developing breast cancer (www.sisterstudy.org).

BREAST CANCER REHABILITATION

As a CMF, I provide women emotional support and help each select a breast prosthesis and a supporting surgical bra. The breast prosthesis fitting after a woman’s mastectomy is an essential part of the rehabilitation process because it supports the healing both physically and emotionally [8]. I believe breast prosthesis selection is one of the most important parts of the oncology journey, which is why finding a CMF is so important. Both the Board for Orthotist/Prosthetist Certification (www.bocusa.org) and the American Board for Certification in Orthotics and Prosthetics Inc (www.abcop.org) provide listings of qualified mastectomy fitters on their Websites.

Breasts are a very important part of the anatomy for a woman. A properly fitted breast prosthesis helps replace the weight of the breast lost after surgery. This replacement not merely is for cosmetic or psychological reasons but is for physical reasons as well. When a natural breast is removed, the body is off balance and will compensate with slight curving of the spine and shoulder drop. Both conditions may lead to chronic lower-back and neck pain. After a woman’s breast surgery, the Ellen H. Lazar Shoppe On Fifth of The Cancer Center at Hackensack University Medical Center provides each woman with a featherweight “fluff” prosthesis, an after-surgery bra, and a copy of the book Breast Cancer: The Complete Guide, written by Y. Hirshaut, MD, FACP, and Peter I. Pressman, MD, FACS, as a gift from the Hackensack University Medical Center Foundation. Then six weeks after surgery, she will have a follow-up visit with her surgeon who will suggest a visit to the Shoppe to be fitted for a breast prosthesis.

A breast form that accommodates the surgery type will restore the feminine shape and complement a woman’s choice of apparel. A well-fitting bra that supports and protects the breast will improve circulation, lymphatic drainage, comfort, and physical appearance. Psychologists theorize that being well-dressed affects work situations. In 1918, a psychologist named Dearborn hypothesized that an individual confident of being well-dressed
was freed from fear of criticism [9]. While clothing plays an important psychological role at all ages, it may be even more important for those who have lost a breast [10].

Women who undergo lumpectomy or mastectomy may develop lymphedema (a swelling as a result of obstruction of lymphatic vessels or lymph nodes) (www.lymphnet.org). According to the World Health Organization, lymphedema affects several million men and women worldwide (www.lymphnet.org). The lymph system transports protein, phagocytized bacteria, and cell wastes out of the skin and subcutaneous tissues and into the vascular system. Of the women who undergo lumpectomy or mastectomy, 33 percent develop lymphedema in the corresponding arm. Sixty-five percent of women who undergo excision of lymph nodes and/or radiation for breast cancer will develop some degree of lymphedema within 20 years [11]. To reduce swelling caused by lymphedema, some physicians will request a fitting for a compression arm sleeve or hand gauntlet, which both are available at the Shoppe.

Obesity places a great demand on the lymphatic system. Researchers have theorized that larger breast size, bra tightness, and aged lymphatics may increase postmenopausal obese women’s risk for breast cancer [11]. Generally, women do not realize how an incorrect bra or cup size negatively affects the lymphatic system and may actually become an instrument of torture (www.breastcare.org) [12].

Mastectomy bras are inexpensive. They are usually cut higher in the center front and are designed to support the prosthesis with an inner pocket to be the “carrier” of the prosthesis. A silicone prosthesis can be worn directly against the skin in any well-fitting bra. However, women should wash the bra and prosthesis daily, because body washes that may contain chemicals could irritate the skin [13].

Aging or gaining or losing weight can affect the ptosis of the breast, an asymmetrical draping of the remaining breast or of the reconstructed breast. Currently, women coming to the Shoppe have undergone lumpectomies, skin-sparing-type surgeries, or partial surgeries and reconstruction. Oncology patients today want personalized care tailored to their individual needs. They want a return to wholeness [14].

**BREAST CANCER HEALTHCARE COVERAGE**

The Women’s Health and Cancer Rights Act of 1998 (WHCRA), administered by the United States Department of Labor and Health and Human Services, gives many individuals who have undergone a mastectomy the right to reconstructive surgery. Generally, group health plans, their insurance companies, and Health Maintenance Organizations that cover medical and surgical mastectomies are subject to WHCRA requirements. If health plans cover mastectomy surgery, the law requires insurers to pay for reconstruction of the breast on which the mastectomy was performed, surgery and reconstruction of the other breast to produce a symmetrical appearance, prostheses (including breast implants), and treatment for physical complications of the mastectomy, including lymphedema [15]. Medicare covers the cost of a breast prosthesis fitting every other calendar year and the expense of surgical bras to support this prosthesis every year.

**CONCLUSION**

More than 2 million women are living with breast cancer in America today. The Young Survival Coalition states that 250,000 are under the age of 40 (www.youngsurvival.org). In general, cancer patients are frequently overwhelmed by the schedule and effects of oncology treatments and frustrated by the difficulties of finding products they need, because many individuals continue to work after their treatment is completed. Products and services that improve self-image and quality of life affect how a person will cope with a breast cancer diagnosis.

The Hackensack University Medical Center has long been at the forefront of Northern New Jersey’s ongoing battle against cancer. The Shoppe was the
first of its kind in New Jersey, serving as a complementary facility that provides information, resources, and products to women with breast cancer. In September, I spoke at the American Orthotic & Prosthetic Association National Assembly for the third time about the importance of the CMF in the rehabilitation of a breast cancer patient, addressing fitting trends and competencies needed in this changing healthcare environment.

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REFERENCES


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