# Men with breast conditions: The role of the WHNP specializing in breast care



he National Association of Nurse Practitioners in Women's Health (NPWH) affirms the role of the women's health nurse practitioner (WHNP), as a member of a multidisciplinary breast care specialty team, in providing specialized breast care for women and men. Furthermore, NPWH supports the removal of any restrictions to the provision of male breast care that are based on the WHNP credential.

WHNPs are educationally prepared to provide care for both women and men with benign and malignant breast conditions. The WHNP program curriculum includes breast pathophysiology, genomics/genetics, assessment and management of breast disorders, and risk assessment for hereditary breast cancers—all applicable to men as well as women.<sup>1</sup> The national WHNP certification examination through the National Certification Corporation (NCC) includes content on breast cancer and other breast disorders.<sup>2</sup> WHNPs choosing to specialize in breast care may expand their knowledge and skills in this area through on-the-job training in the clinical setting and through continuing education (CE) programs.

As of now, some states and healthcare institutions restrict WHNPs from providing care for male patients with breast cancer or other breast conditions. Given that the diagnostic procedures and treatment are the same for women and men, this restriction is unwarranted. WHNPs specializing in breast care are qualified to provide this care for all individuals.

## Background

The majority of individuals who develop breast cancer are women. Nevertheless, breast cancer is not exclusively a female disease. Current knowledge concerning breast cancer risks, statistics, diagnosis, and treatment in men provides a background to understand the role of the WHNP specializing in breast care as it applies to male patients. Although the background information in this section focuses on breast cancer, it is important to keep in mind that specialized breast care encompasses both malignant and benign breast conditions.

#### **Risk factors**

An individual may present to a breast specialist not because of signs or symptoms that could indicate breast cancer but, rather, because of an identified potentially increased risk for breast cancer. For men, well-established breast cancer risk factors include family history and BRCA1/2 mutations, primarily those of BRCA2. In fact, 5%-10% of men with BRCA2 mutations eventually develop breast cancer.<sup>3,4</sup> In addition, conditions that alter the estrogen-to-androgen ratio (e.g., Klinefelter syndrome, obesity, cirrhosis, history of prostate cancer treated with estrogen) are associated with an increased risk of breast cancer in men.<sup>3,5,6</sup> Although some of these risk factors apply only to men, the principles of risk assessment and counseling are the same for women and men. The National Comprehensive Cancer Network provides detailed guidelines for risk assessment, criteria for offering genetic counseling and testing, and recommendations for surveillance of individuals identified as being at increased risk for breast cancer.<sup>7</sup>

#### Incidence

The American Cancer Society predicts that 2,550 men will develop breast cancer in 2018.<sup>3</sup> By comparison, an estimated 266,120 new cases of breast cancer in women are expected in 2018.<sup>8</sup> Consistent with these statistics, male breast cancer comprises fewer than 1% of all breast cancer cases, as well as fewer than 1% of overall male cancer cases. Although these numbers and percentages in men are small compared with those in women, many men with breast disease will present to a breast care center at some point during diagnosis and treatment.

#### Diagnosis

Diagnostic tests used when an individual presents with a breast mass or other breast changes that may indicate a malignancy are the same for women and men. These tests include clinical breast examination; imaging modalities such as mammography, ultrasound, and magnetic resonance imaging, as indicated; and biopsy of the mass.<sup>5,9</sup> The most common type of breast cancer diagnosed in men (80%-90% of cases) is infiltrating ductal carcinoma. This breast cancer type is also the most common type in women (80%). About 10% of breast cancers in men are ductal carcinoma *in situ*. Fewer than 2% of male breast cancers are lobular carcinomas, primarily because most men have minimal lobular tissue.<sup>3</sup> Estrogen-, progesterone-, and HER2-receptor testing of breast cancer cells is part of the evaluation for both women and men. Many breast cancers in men demonstrate receptors for the hormones estrogen and progesterone.<sup>3,10,11</sup>

#### Staging

Histologic staging of breast cancer is the same for women and men. Staging is defined according to tumor size, nodal involvement, metastasis, and pathologic characteristics of the cancer, including receptor status and tumor grade.<sup>3,6,9,12</sup> The pathophysiology of breast cancer metastasis is the same in women and men.<sup>3</sup> Studies do suggest that men, compared with women, are diagnosed with higher-stage tumors and have a poorer prognosis overall. The poorer prognosis correlates with delay in diagnosis and treatment—thought to occur in part because of lack of awareness of breast cancer in men.<sup>5,6,10</sup>

#### Treatment

Four modalities are used either as single therapies or in combination for the treatment of breast cancer in both women and men. These modalities are surgery, radiation, chemotherapy, and hormone therapy.<sup>3,6,12</sup> In the absence of randomized controlled trials of the treatment of breast cancer in men, current guidelines are based for the most part on treatment of breast cancer in women.<sup>13</sup>

#### Follow-up care and concerns

The care provided by healthcare professionals specializing in breast cancer goes beyond initial diagnosis and treatment. The needs of both male and female breast cancer survivors are multifaceted and ongoing. Genetic counseling/testing, as appropriate, is one component of this care (if not done prior to treatment). Just as for females, genetic testing for male breast cancer survivors can provide information relevant to their surveillance needs and those of their family members.<sup>6,7,12,14</sup> Surveillance recommendations for both male and female breast cancer survivors include clinical breast/chest wall examination twice yearly for the first 5 years and then annually thereafter.<sup>13,14</sup> Although only limited data support the use of breast imaging as part of surveillance for male breast cancer survivors, it may be offered.<sup>14</sup>

Care for both male and female breast cancer survivors also includes management of side effects of treatment. Men treated with hormone therapies may expe-

rience side effects similar to those in women, including hot flashes, weight gain, and sexual dysfunction. In fact, approximately one in four men discontinues therapy prematurely because of bothersome symptoms.<sup>6,14</sup> Although management of breast cancer treatmentrelated side effects in men is less well studied than that in women, similar lifestyle and medication approaches are used.<sup>14</sup>

Because any type of cancer, as well as its treatment, can affect sexual functioning in men and women, WHNPs should ask patients about their sexual health at follow-up visits and refer them to specialists when needed.<sup>14-17</sup> The WHNP curriculum includes specific content on male sexual health that prepares WHNPs to assess sexual health conditions, to address psychosocial factors and conditions that affect sexual health, and to collaborate or refer appropriately for male sexual dysfunction treatment.<sup>1</sup> The NCC WHNP certification examination includes content on male sexuality and sexual dysfunction.<sup>2</sup>

Both men and women with a diagnosis of breast cancer may experience body image disruption, anxiety, and depression.<sup>14,15</sup> Although similarities between male and female breast cancer survivors exist in terms of psychological and guality-of-life (QOL) concerns, certain concerns are more likely to affect men. For example, some men may feel stigmatized by having a diagnosis so strongly associated with women.<sup>6,14,15</sup> They may feel embarrassed to talk with their healthcare provider and feel isolated because they cannot find other male breast cancer survivors to whom then can relate.<sup>14,15</sup> WHNPs are prepared in educational and clinical environments that emphasize attention to psychological, social, and cultural factors that influence healthcare and health outcomes. This holistic and individualized care extends across genders.

## Gaps in knowledge

More research is needed regarding all aspects of male breast cancer. Biological differences between male breast cancers and female breast cancers may have implications for treatment strategies.<sup>11,12,14</sup> Men with breast cancer should have an opportunity to participate in clinical trials and/or be added to a tumor registry to provide data on the care and outcomes of a rare disease. Studies conducted to better understand psychological and QOL problems for men with breast cancer could lead to improved care. All healthcare professionals specializing in breast cancer care for women and men are expected to stay current on evidence for best practice.

### **Implications for WHNP practice**

WHNPs who choose to specialize in breast care have a strong foundation to prepare them for this role. The WHNP curriculum and the WHNP certification examination reflect the knowledge base needed to provide care in this specialty area, which includes benign and malignant breast conditions in women and men. On-the-job training and CE programs further expand the knowledge and skills appropriate to providing this care.

Principles of breast cancer risk assessment and counseling are the same for women and men. Diagnostic testing, hormone-receptor evaluation, and staging for breast cancer are the same. Treatment modalities are the same. Management for treatment-related side effects and surveillance strategies for breast cancer survivors are similar for women and men. Holistic and individualized care is a cornerstone for all WHNPs. And those WHNPs who specialize in breast care are qualified to provide care for women *and* men.

#### **NPWH will:**

- Educate employers and state boards of nursing as needed concerning the qualifications of WHNPs to specialize in breast care; and
- Advocate for removal of any current restrictions to WHNPs providing breast care for men.

#### References

- NPWH/AWHONN. Women's Health Nurse Practitioner: Guidelines For Practice and Education. 7th ed. Washington DC: NPWH/AWHONN; 2014.
- 2. National Certification Corporation. 2018 Candidate Guide Women's Health Nurse Practitioner. Chicago, IL: National Certification Corporation; 2018.
- 3. American Cancer Society. Breast Cancer in Men. 2016. cancer.org/cancer/breast-cancer-in-men/about.html
- Pritzlaff M, Summerour P, McFarland R, et al. Male breast cancer in a multi-gene panel testing cohort: insights and unexpected results. *Breast Cancer Res Treat*. 2016;161(3):575-586.

- 5. National Cancer Institute Physician Data Query (PDQ). Male Breast Cancer Treatment. 2017. cancer.gov/cancertopics/ pdq/treatment/malebreast/healthprofessional
- Ruddy KJ, Wine EP. Male breast cancer: risk factors, biology, diagnosis, treatment and survivorship. *Ann Oncol.* 2013;24(6):1434-1443.
- National Comprehensive Cancer Network. Genetic/ Familial High-Risk Assessment: High-Risk Assessment: Breast and Ovarian Cancer. 2017. nccn.org/professionals/physician\_gls/pdf/genetics\_screening.pdf
- 8. American Cancer Society. Breast Cancer. 2018. cancer. org/cancer/breast-cancer.html.
- National Comprehensive Cancer Network. Clinical Practice Guidelines in Oncology: Breast Cancer Screening and Diagnosis. 2017. nccn.org/professionals/physician\_ gls/pdf/breast-screening.pdf
- 10. Uslukaya O, Gümüs M, Gümüs H, et al. The management and outcomes of male breast cancer. *J Breast Healtb*. 2016;12(4):165-170.
- Nilsson C, Homlqvist M, Bergkvist L, et al. Similarities and differences in the characteristics and primary treatment of breast cancer in men and women – a population based study (Sweden). *Acta Oncol.* 2011;50(7):1083-1088.
- 12. Shahidsales S, Ersi MF. Male breast cancer: a review of the literature. *Rev Clin Med.* 2017;4(2):69-72.
- 13. National Comprehensive Cancer Network. Clinical Practice Guidelines in Oncology: Breast Cancer. 2018. nccn. org/professionals/physician\_gls/pdf/breast.pdf
- 14. Ferzoco RM, Ruddy KJ. Optimal delivery of male breast cancer follow-up care: improving outcomes. *Breast Cancer (Dove Med Press)*. 2015;7:371-379.
- 15. Kipling M, Ralph J, Callanan K. Psychological impact of male breast disorders: literature review and survey results. *Breast Care*. 2014;9(1):29-33.
- 16. National Cancer Institute. Sexual Health Issues in Women with Cancer. 2017. cancer.gov/about-cancer/ treatment/side-effects/sexuality-women
- 17. National Cancer Institute. Sexual Health Issues in Men with Cancer. 2017. cancer.gov/about-cancer/treatment/ side-effects/sexuality-men

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