Screening – and surveillance of women at increased breast cancer risk

Screening – risk assessment

Rationale

Women with a family history of breast cancer frequently overestimate their own risk.

Good practice points

- 1.3 Women are offered evidence-based information on risk factors, prevention and early detection.
- 1.4 Consistent risk assessment is essential so relatives of the same family who live in different areas of New Zealand are provided with the same risk estimate.
- 1.5 The following risk categories developed by the National Breast and Ovarian Cancer Centre (now Cancer Australia)¹ should be used.

Categories of risk (lifetime up to age 75)

- At or slightly above average/population risk This includes women with no family history, and women with one first degree relative or one or two second degree relatives diagnosed at age 50 or older (see 1.1.6 below). Lifetime risk of breast cancer is between 1 in 8 and 1 in 11 (9–12%). Covers more than 95 percent of the female population.
- Moderately increased risk This includes women who have a first degree relative diagnosed before age 50, or two or more first degree relatives on the same side of the family diagnosed at any age (see 1.1.6 below). Lifetime risk of cancer is between 1 in 4 and 1 in 8 (12–25%). Covers less than 4 percent of the female population.
- **High risk** Potential high risk and known high risk includes women who are known to carry a breast cancer susceptibility gene mutation (eg, BRCA1 or BRCA2) and women who have a strong family history with at least two first degree relatives affected, plus other features (see 1.1.6 below). Lifetime risk of breast cancer is between 1 in 2 and 1 in 4 (>25%). Covers less than 1 percent of the female population.
- 1.6 For more details refer to the National Breast and Ovarian Cancer Centre guideline *Advice* about Familial Aspects of Breast Cancer and Epithelial Ovarian Cancer (NBOCC 2010), available from: www.canceraustralia.gov.au/sites/default/files/publications/nbocc-bog-2010-web-a4-printable_504af02a673fd.pdf.

¹ The National Breast and Ovarian Cancer Centre amalgamated with Cancer Australia in 2011.

- 1.7 The National Breast and Ovarian Cancer Centre guideline is primarily based on familial risk assessment. It does not include other risk factors, such as biopsy showing atypical ductal hyperplasia, age at menarche, age at menopause, age at first child birth, previous radiation therapy and breast density. Other tools may be better to assess risks associated with medical and reproductive history; for example, the National Cancer Institute Breast Cancer Risk Assessment Tool (www.cancer.gov/bcrisktool) and the IBIS (also called the Tyrer-Cuzick) Breast Cancer Risk Evaluation Tool (www.ems-trials.org/riskevaluator).
- 1.8 Health care professionals should discuss risk issues fully so that the woman understands what she can and cannot do to modify her risk of breast cancer, and the effect this will have on her risk of other disease and conditions.
- 1.9 Genetic testing may be appropriate for some families assessed as potentially high-risk by Genetic Health Service New Zealand. The *eviQ Cancer Genetics Breast and Ovarian Referral Guidelines* should be used to determine appropriate referrals to Genetic Health Service New Zealand. See Genetic services section and Appendix 5.
- 1.10 Breast care units should have documented policies for managing women with increased risk (expert opinion).
- 1.11 Women who fall in risk category 1 (at or slightly above average/population risk) should be screened as per population screening (see Standard 1.1)