10-minute consultation

Family history of breast cancer

Anneke Lucassen, Eila Watson

This is part of a series of occasional articles on common problems in primary care

Wessex Clinical Genetics Service, The Princess Anne Hospital, Southampton SO16 5YA
Anneke Lucassen
consultant in clinical genetics

Cancer Research UK Primary Care Education Research Group, University of Oxford, Oxford OX3 7LF

Eila Watson
deputy director

Correspondence to: A Lucassen
annekel@soton.ac.uk

The series is edited by general practitioners Ann McPherson and Deborah Waller (ann.mcpherson@dphpc.ox.ac.uk)

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A woman comes to see you because she is approaching the age, 45, at which her sister developed breast cancer. She is worried about her risk and is keen to know if there are any preventive measures she can take.

What issues you should cover

- You will need to take a family history, going back at least two generations on both sides of the family. Start with the patient and mark her with an arrow on the chart. Note ages and sex of parents, children, and siblings (circle for female relatives and square for males). Ask how many siblings each parent has or had, whether they themselves had children, and about grandparents. Note current ages or ages at death and cause of death. Computer pedigree drawing packages are under development.
- Ask whether the family has had any other cases of cancer. Use colour or pattern codes to indicate the type of cancer. Note the age at diagnosis of any cancers (more important than age at death).
- If relatives have not had cancer but have died, record their age at death (female relatives who died young from other causes may have harboured an inherited tendency, while those who died in their 70s or 80s are less likely to have done so).
- Inquire about her father's family history, as cancer predisposing genes can be inherited from either parent.
- If details of family history are unclear ask her to find out more from relatives or death certificates and to come back for a second appointment with the information. Often family stories of cancer turn out to be different on closer investigation (for example, reported ovarian cancer may be cervical cancer).
- Establish whether anyone else in the family has obtained advice. Has anyone else been screened or had genetic studies done?
- Consider hormonal risk factors: age of menarche and menopause, pregnancies, and use of hormonal contraception or replacement therapy. Long term use of hormonal contraception or replacement therapy increases the risk of breast cancer. Hormonal contraception may protect against ovarian cancer.

Useful reading

Cancer Research UK Primary Care Education Research Group. Familial breast and ovarian cancer pack. www.dphpc.ox.ac.uk/crcpcerg

Lucassen A, Watson E, Eccles D. Evidence based case report: advice about mammography for a young woman with a family history of breast cancer. *BMJ* 1994;322:1040-2

National Institute for Clinical Evidence. Familial breast cancer (NICE guideline CG014). www.nice.org.uk

- Ethnic origin may be a factor. Certain groups (such as Ashkenazi Jews) have a higher risk of inherited breast cancers.
- You will need to elicit her main worries about cancer. The options women want to explore may depend on their experience of cancer in the family. For example, women who have seen relatives die rather than be successfully treated are more likely to consider options such as prophylactic mastectomy.

What you should do

- As a rule of thumb you can reassure her if, as in this case, she has either just one first degree relative (mother, sister, or daughter) with breast cancer that was diagnosed after the age of 40 or two close relatives (first or second degree) whose cancer was diagnosed after a mean age of 60.
- If this is the case, explain that the risk of carrying a gene for breast cancer is low and that her risk of developing breast cancer is probably similar to that of any woman of a similar age in the general population. Tell her that additional screening will not be required. Ensure that she is breast aware and knows about the NHS breast screening programme from age 50. Ask her to tell you if another member of the family develops breast or ovarian cancer.
- To make sure that she is in this low additional risk group, look at national guidelines (such as Cancer Research UK's information pack on familial breast and ovarian cancer or the NICE guidelines—see Useful reading) and local guidelines.
- If, however, she meets the referral criteria in the guidelines, refer her to secondary care (either the breast unit or genetics unit, depending on local circumstances), where mammography may be arranged. For women with a very strong family history (for example, four close relatives whose breast cancer was diagnosed in their 30s or 40s) genetic testing, chemoprevention, and prophylactic surgery options may be considered.