

## Guideline 2. Investigation of an abnormality that is discovered by mammography

### **I had an “abnormal” result on a routine mammogram. Does this mean I have cancer?**

Most abnormalities that show up on routine mammograms are not cancer. However, more tests will be needed to make a firm diagnosis.

### **What tests will I need to have?**

Your doctor will take a clinical history, carry out a physical examination and order more thorough x-rays of the breast (a “diagnostic” mammogram). Ultrasound examination can also be valuable, especially to distinguish between cysts (harmless fluid-filled sacs) and other kinds of abnormalities.

### **What will the physical examination include?**

The doctor will thoroughly examine the breasts and the areas under the armpit and above the collarbone for signs of cancer or other conditions that could cause the abnormal image on the mammogram.

### **What if a lump is found during the physical examination?**

If a lump *can* be felt in the breast, go to guideline 1 for a description of the tests used to diagnose it, since breast lumps can be caused by several conditions. (This guideline describes the tests for abnormalities that can only be seen on the mammogram but not felt.)

### **Why do I need a another mammogram?**

You will need “diagnostic” mammog-

raphy, which is more thorough than the routine “screening” mammography you already had. Diagnostic mammography uses extra compression to “push” normal breast tissue out of the way and give a clearer image of the area where the abnormality is located. If tiny flecks of calcium (microcalcifications) are noticed, magnified views will be taken since these flecks are sometimes associated with cancer. If there is any doubt about what the image shows, it is recommended that 2 individuals experienced in reading mammograms should interpret the results. To ensure a high-quality mammogram, which is important for diagnosis, you should go to a mammography centre that has been certified by the Canadian Association of Radiologists.

### **What are the next steps?**

The next steps depend on the likelihood that cancer is present, as judged by the mammograms you have had so far.

If the abnormality is *judged to be definitely benign* (no cancer), no further investigation is needed. (You should, of course, continue to have your usual check-ups.)

Even if the abnormality cannot be diagnosed with certainty as benign, it still may be *very unlikely to be cancer*. In this situation, usually nothing is recommended except regular follow-up mammography and physical examinations to detect any suspicious change quickly. These follow-up examinations usually take place after 6, 12 and 24 months, and annually for 2 to 3 years after that if no changes are seen. If the abnormality does turn out to be cancer, it will usually

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show a change within the first year. Rarely, it may take longer.

Although this sort of abnormality is very unlikely to be cancer, there is still a very small chance that it might be. If you feel a strong need to know with certainty at this point, a biopsy can be performed.

If the *risk of cancer is judged to be intermediate* (a probability of cancer between 2% and 10%), a “needle biopsy” (either fine-needle aspiration or core biopsy) is usually recommended to remove a small amount of tissue for microscopic examination. Fine-needle aspiration removes only a few cells. A core biopsy, using a larger needle, can give a more reliable result in some instances. Since the lump can only be seen on the mammogram but not felt, the doctor will use a mammogram or ultrasound “picture” to help locate the abnormality while doing the needle biopsy.

Sometimes the *risk of cancer is judged to be high* (a probability greater than 10%). In these instances, some centres may recommend core biopsy to remove some tissue for examination, and others may recommend surgical removal of the entire area of abnormal tissue for examination. This is called a “surgical biopsy.” Just before the operation, a mammogram or ultrasound image will be used to guide the placement of tiny wires in your breast. These are needed to “mark” the abnormal area for the surgeon (since no lump can be felt). After removal the tissue is x-rayed to make sure it contains all the abnormalities seen on the mammogram. Often, if the abnormal tissue was removed during the biopsy, no further surgery is necessary.

### **I have now seen several different specialists for tests and consultations. Who can I talk to about what is happening overall?**

Usually your family doctor will coor-

dinate the investigations and give you the results. If you have been referred to a centre for breast health, the specialists there may give you the results. Make sure you know who is *your* doctor responsible for keeping *you* informed. Overall, a reliable diagnosis should be reached as quickly as possible using the fewest possible procedures, and you should understand the reasons for each test and the meaning of the results. If you feel unsure, ask.

### **What if cancer is found?**

This depends on the type of cancer that is found. One possible diagnosis is ductal carcinoma in situ (DCIS). This is a type of cancer that is located in the milk ducts. It is less likely to spread and has a better outlook than “invasive” cancers. For more information on DCIS and its treatment, see guideline 5.

If your tests show invasive cancer (cancer that has invaded the fatty tissue of the breast), you will have more decisions to make. Together, you and your doctors will decide on the kind of surgery that is best for you and whether you need to have other treatment such as radiotherapy, chemotherapy or hormonal therapy. Guidelines 6, 7 and 8 in this series will provide information to help you with these decisions.

Above all, don't feel rushed into taking action. This is a difficult time, and it's normal to feel anxious. A delay of 1 or 2 weeks will have no significant effect on your situation and will give you time to gather information and talk things over frankly and openly with your doctor. Don't be afraid to ask questions or to ask for any additional support you need. Family, friends and other women who have had breast cancer can be especially important at this time. ♦