Know about ductal carcinoma in situ (DCIS) and treatment

Princess Margaret

For patients who have ductal carcinoma in situ (DCIS)

Read this resource to learn:

• What is ductal carcinoma in situ (DCIS)

• How is DCIS diagnosed (found)

• What are your treatment options

• What follow-up appointments you will need

This resource was adapted from an original resource created in 2009 at Mount Sinai Hospital titled, Patient Information for Ductal Carcinoma in Situ (DCIS) written by Velita Contiga RN, CON (C).
What is ductal carcinoma in situ (DCIS)?

Ductal carcinoma in situ is an early form of breast cancer. Out of the four stages of breast cancer, DCIS is known as stage zero. Sometimes DCIS is called “pre-cancer”.

DCIS is a type of tumour that only grows in the milk ducts of the breast. It does not spread out into the rest of the body.

Although DCIS only stays in the milk ducts, milk ducts do cover a large area of the breast. So, treatment may involve large areas or even your entire breast.

How is DCIS diagnosed (found)?

DCIS is often found during a mammogram (x-ray exam of the breast). On a mammogram DCIS tends to look like micro calcifications (small calcium deposits). It can be hard to spot.

Calcium deposits are very common and are not always a sign of DCIS. A radiologist (medical imaging doctor) may be able to tell the difference between DCIS and normal calcium deposits if:

- The shape or pattern of growth of the calcium deposits is not normal
- The growth of calcium deposits has changed from a last mammogram

Most of the time, DCIS cannot be felt by hand.

If your doctor thinks you have DCIS, they will ask you to have a biopsy. This is when the doctor takes small samples of tissue from the breast for testing.
What are your treatment options?

The first treatment you will need for DCIS is surgery. Many people may also need radiation treatment depending on the surgery type and the amount of DCIS found.

Read the section below to learn about each treatment option.

**Surgery**

Everyone who has DCIS will need surgery. There are two types of surgery:

1. Lumpectomy (removing a part of the breast)
2. Mastectomy (removing the whole breast)

Your doctor will discuss with you which option is right for you.

About two to three weeks after your surgery, you will have an appointment with your surgeon. They will talk to you about the test results from the tissue samples taken during surgery.

The test results will show your health care team:

- **The type and grade of the DCIS.** This is a description of what the cells look like under a microscope.

- **Whether all the DCIS has been removed.** The pathologist will look at the tissue removed during surgery. They will check to see how much normal tissue is around the area of concern. If there are cancer cells all the way to the edge of this area of concern, some DCIS may still be in your body. Doctors call this test result the status of “the margins of the tumour”.

If not all the DCIS has been removed, you may need a second surgery to remove the remaining DCIS.
Treatment options after surgery include:

1. **Radiation treatment**: This treatment uses high-energy radiation to kill cancer cells. It works by damaging and later killing the cells in the treatment area.

   If you had a lumpectomy, you will need radiation treatment after surgery. It will help lower the chance that the DCIS will come back. It will also help lower the chance of you getting breast cancer that could spread (invasive cancer) in the future.

   If you had a mastectomy, you will most likely not need radiation treatment after surgery. You may need radiation treatment if the tumour has “close margins” or if the area of DCIS is very large.

2. **Endocrine therapy**: Based on current information, the use of hormone-blocking (also known as endocrine or hormone) therapy is not a standard treatment for DCIS. In some cases of DCIS, the use of endocrine therapy may be suggested.

### After treatment

**What are the survival rates for DCIS?**

Most patients who have DCIS are cured.

**Will I have follow up appointments?**

Yes, you will need to book a follow up with a doctor once a year.

During the appointment, you will get:

- a mammogram or other type of breast imaging
- a breast exam

Your surgeon will tell you how to book appointments, and which doctor(s) you will meet for the follow-ups.