

## **DCIS AT RRHS**

### ***What is Ductal Carcinoma In Situ?***

Ductal Carcinoma In Situ, also called DCIS, is a type of breast cancer. Unlike invasive breast cancers, DCIS is contained within the milk ducts of the breast. In other words, it has not yet spread to the surrounding tissues. DCIS is a concern, however, because it indicates the affected person has an increased risk for developing invasive breast cancer. In addition, the presence of DCIS can be associated with current invasive breast cancer.

### ***How does it present?***

Typically, DCIS does not have symptoms or physical findings. About 80% of the time, it presents as an abnormality on mammography. DCIS can also present as a breast mass or nipple discharge.

### ***What are imaging options?***

Mammography is the first line of DCIS detection. DCIS can appear as suspicious micro calcifications, a nodule or mass, or as architectural distortion. It also can be occult (not visible) on mammography.

If there is a nodule or distortion on the mammogram, or if there is a palpable breast mass, ultrasound will often be performed.

Occasionally, some patients may undergo a breast MRI which can provide additional information.

### ***What are diagnosis options?***

Most DCIS is diagnosed with either an ultrasound guided biopsy or a stereotactic biopsy. The decision for which type of biopsy performed often depends on whether the area of concern is visible on ultrasound imaging.

Occasionally, the DCIS is diagnosed by an excisional biopsy. An excisional biopsy is minor surgery which involves the removal of the area of concern.

DCIS may also be incidentally detected when the individual has breast surgery for another abnormality.

### ***What are treatment options?***

Surgery is the mainstay of DCIS treatment. The involved tissues are taken out. This could be accomplished with a lumpectomy (breast conserving) or a mastectomy (the removal of the entire breast). The decision for lumpectomy and mastectomy depends on many different factors. Discussion with the treating surgeon and other members of the team can help patients choose the best treatment option.

After surgery, DCIS treatment can include post-surgery radiation. Hormonal therapy is used in certain situations. Chemotherapy typically is not utilized.

### ***Why treat DCIS?***

By itself, DCIS is not life threatening. The concern is that some DCIS can turn into invasive cancer. Invasive cancer can then spread into the surrounding tissue and even throughout the body. It is estimated that 30 to 50% of DCIS can turn into invasive breast cancer. We still do not have the ability to tell which DCIS is going to turn into invasive breast cancer.

### ***Why did we study the DCIS cases at Rutherford Regional Health System?***

At RRHS, we see a fair amount of breast cancer. In order to make sure we are providing quality care, it is important to study different aspects of our diagnostic and treatment pathway. This allows us to see how we are doing and potentially identify areas of improvement. The quality improvement process is ongoing, and there are many different studies or projects that are always being performed at the hospital. We need to do more than suspect or assume we are providing quality care, we need to demonstrate it.

All cancer diagnoses in the county are tracked as part of our quality process. From this database, we extracted out all patients diagnosed with DCIS or LCIS (lobular carcinoma in situ) in 2012, 2013, and 2015. The patients' records were then evaluated to gather data concerning many different aspects of the diagnosis and treatment. All pertinent imaging studies were reviewed. As many as thirty different data points were obtained for each patient. This data was then compared to national data standards.

### ***How many cases did RRHS see?***

We had 25 cases included in our study. All cases involved females. While DCIS can occur in men, it is very uncommon. The average age of patients was about 67 years old. This is about 10 years older than the national average age. However, the demographics of our county are older than the national average, and so this was not unexpected. Twenty four of the women had surgical treatment at RRHS with one opting to receive treatment elsewhere.

### ***How did we do?***

Overall, I was pleased with the results of the study. Twenty cases presented on screening or with an abnormal imaging finding. This is in line with the national average. All women had a mammogram with sixteen ultrasounds performed. Two breast MRIs were performed. All women had a clinical pre-surgical lymph node assessment, and many had axillary lymph node imaging assessment with ultrasound and/or MR. A minority underwent sentinel lymph node assessment or axillary dissection.

The vast majority of cases had 11 mm or less of involvement with only 5 cases exceeding this size. Most patients underwent lumpectomies (18 cases). None of the patients were found to have invasive breast cancer at surgery.

### ***What was learned from the study?***

At RRHS, we take a multi-disciplinary team approach to the diagnosis and treatment of breast cancer. As a team, we have developed a "breast cancer protocol" that is followed to ensure every patient gets the best treatment for their breast cancer. Many cases are discussed at a weekly Tumor Board that includes Medical Oncologists, Radiation Oncologists, Surgeons, Pathologists, Pulmonologists, Urologists, Radiologists, and many members of the support team including Patient Navigators, the Director of Oncology and Education, and others involved in the care of the patient. In addition, there is a quarterly Cancer Committee meeting involving many of the same individuals with additional support from the American Cancer Society, dietary, and Hospice. The results of this study were shared with the committee, and a presentation discussing DCIS was also performed.

I am pleased that there were no glaring deficiencies found during the study. The timing of ultrasound assessment of the axilla was optimized, and focus was placed on some documentation improvements. As with any process, communication is key and can always be improved.

Perhaps most importantly, this study demonstrated that we are providing high quality diagnosis and treatment of breast disorders including DCIS at Rutherford Regional Hospital.

I appreciate the support of Lynn Ross, the Director of Oncology and Education, in helping me gather the necessary data for this project. I also appreciate the assistance of Dr. Bob Stallings, Pathology.

### ***Where can you find additional information?***

For more information of DCIS and breast cancer, there are many wonderful resources online. Recommended sites include:

American Cancer Society <http://www.cancer.org/cancer/breastcancer/index>

National Cancer Institute <http://www.cancer.gov/types/breast>

Susan G Komen for the Cure <http://ww5.komen.org/>

<http://www.breastcancer.org/>