



# SENTINEL NODE BIOPSY

**One of the Most Valuable  
Breast Cancer Breakthroughs**

BY DR. WILLIAM C. MAJOR

With increasingly new advances in surgical techniques, patients are afforded many options in the treatment of breast cancer. One of the most talked about new findings in breast cancer is using a sentinel lymph node dissection to stage breast cancer and determine treatment. When appropriate, the use of this procedure can lessen the magnitude of breast cancer surgery and reduce the incidence of post-operative side effects.

Whether the patient chooses breast conserving surgery or mastectomy, there almost always will be an accompanying procedure to assess the status of the lymph glands under the arm on the side of the cancer. If the pre-operative evaluation suggests the lymph nodes are unlikely to contain cancer, the patient will have a sentinel node biopsy.

This procedure tries to identify several of the lymph nodes that would be first to trap cancer cells should they spread through the breast lymph channels into the lymph glands under the arm. Previously, if cancer cells were found in the sentinel lymph node, it would necessitate the removal of many other lymph glands, an axillary dissection.

However, recent studies by the American College of Surgeons Oncology Group have found that there is no significant difference in survival amongst those with sentinel nodes with early stage cancer who are treated with radiation and chemotherapy versus those who

have an axillary dissection. This has led to significant changes in breast cancer management and greatly reduces the number of people who have to endure additional surgery for treatment.

One of the first patients I used sentinel node biopsy on was Debra Winters. Diagnosed and treated for breast cancer in 2000, today Debra remains cancer free.

"When I had my mastectomy I was of course concerned about the cancer and the possibility of it spreading," said Debra. "At the same time Dr. Major did my mastectomy, he did a sentinel node biopsy."

To identify the sentinel node, a surgeon injects a radioactive substance, a blue dye or both near the tumor to locate the position of the sentinel lymph node. The surgeon then uses a device that detects radioactivity to find the sentinel node or looks for lymph nodes that are stained with the blue dye. Once the sentinel lymph node is located, the surgeon makes a small incision (about one-half inch) in the overlying skin and removes the node for evaluation.

There are many good reasons why women want to minimize the number of underarm lymph nodes that are removed. Lymph node surgery can lead to uncomfortable temporary side effects, such as lymph backup in the armpit, called seroma. Other side effects can

linger, including mild armpit discomfort and numbness in the armpit and the upper arm, and swelling of the arm on the side of the affected breast, called lymphedema.

"I believe I had a much easier recovery because Dr. Major performed only a sentinel node biopsy. I didn't experience any problems with my arm during my recovery, none. Zero side effects," said Debra. "I had the surgery on Friday, and was back in church on Sunday."

Sentinel node dissection provides critical treatment insights with the least possible surgery and trauma. Studies have shown that after almost five years, women who had just the sentinel node removed were as likely to be alive and free of cancer as women who had more lymph nodes removed.

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