Management of the Axilla

A series of classic randomized trials — including NSABP B-04 — formed the basis for level I and II axillary node dissection becoming a standard of care for invasive breast cancer. The emergence of sentinel lymph node biopsy (SLNB) as an initial staging procedure has led to a new generation of trials evaluating the need for axillary dissection in women with both pathologically negative nodes and positive nodes. A critical related question is the interpretation of micrometastases in both the sentinel lymph node and bone marrow. The value of treating the axilla in elderly women is also being examined, as well as the potential for treating the axilla with radiotherapy.

**Rationale for Axillary Dissection**

There are three reasons to do axillary dissection: regional control, staging, and to improve survival. For staging, we are now teaching surgeons around the world to tell us the accuracy of sentinel node biopsy. For regional control, surgery results in almost 100% control, as does radiation therapy, so before we abandon something that works very well, we have to be very careful. We don’t have any long-term data on regional control for sentinel node. Regarding survival — there may be a survival advantage in controlling the axilla. The few studies that looked at this were done in an era when we randomized hundreds of patients, not thousands of patients, so the statistical power was not there. I’ve personally never done a sentinel node procedure in a breast cancer case outside of a clinical trial. I’m not going to say that it shouldn’t be done — this is a judgment call. But in terms of making the claim that sentinel node is as good as axillary dissection, we don’t have the data and we are in an era of evidence-based medicine.

——David Krag, MD

**Rationale for ACOS 2-11 Trial**

Many surgeons believe that axillary dissection is therapeutic, and they are reluctant not to perform axillary dissection in sentinel node-positive patients. However, a number of randomized studies failed to show that axillary dissection improves survival in sentinel node-positive women, the sentinel node may be enough because often it’s the only involved node. Virtually all node-positive women in this country receive adjuvant systemic therapy, and many patients are also receiving opposed tangential field radiation. In studies where patients received lumpectomy with radiation and no axillary dissection, the axillary recurrence rate was extraordinarily low. I think ACOS 2-11 is a very important, very justifiable and ethical trial. For an operation that’s been used for 100 years, it’s time to answer the question about the need for axillary dissection.

——Armando Giuliano, MD

**Clinical Trials of SLNB**

NSABP trial B-84 showed no difference in survival outcome between axillary dissection at the time of diagnosis and delayed axillary dissection if clinically positive nodes developed. Since that trial didn’t show a survival difference, it is reasonable to expect that NSABP B-82 would? I think that’s a very open question. However, B-32 will tell us about the clinical false-negative rate when many surgeons do sentinel node biopsy, which is an important issue to inform patients about. The ACOS trial addresses the much more controversial question of whether to remove axillary nodes after the patient has been staged as node-negative. It challenges the dogma that people have had for years.

——Monica Morrow, MD

**Accrual to Sentinel Node Trials**

In some ways, sentinel node mapping is becoming a victim of its own success. As surgeons realize that it is not a technical feat to learn, and as more patients become aware of it through the Internet and other sources, it will become harder and harder to find both patients and physicians willing to participate in these randomized clinical trials.

——Patrick Borgen, MD