Axillary Radiotherapy May Be A Safe Alternative

BY BRUCE JANCIN
Denver Bureau

SAN ANTONIO — Axillary radiotherapy appears to be a safe and viable alternative to sentinel lymph node biopsy, which proved positive in 21% of a group of 77 sentinel node biopsy-positive patients underwhelmed about breast reconstruction.

She presented a prospective single-center study that indicated axillary radiation plus systemic therapy provided adequate local control in such patients—and with a survival benefit—when compared with axillary dissection.

The impetus for this study was the recognition that axillary dissection beyond the sentinel lymph node biopsy may no longer be essential in an era when the number of positive lymph nodes isn’t a major consideration in decisions regarding systemic therapy, as reflected in the latest practice guidelines.

The average breast tumor size has decreased, with a simultaneous reduction in the need for axillary dissection, noted Dr. Gadd, a surgical oncologist at the Dana-Farber Cancer Institute and Harvard Medical School, Boston.

Dissection of the axillary node basin entails significant morbidity.

Studies have routinely documented a 25%-50% reduction in standard quality-of-life measures along with an average 20% incidence of lymphedema, numbness in 35% of patients, chronic pain in 10%, and limited arm range of motion in 5%-10%. Investigators believed they could safely spare patients from all of this through the use of radiotherapy to control disease in the axilla, she explained.

Dr. Gadd reported on a study of 4,900 patients with clinically node-negative stage T1-2 invasive breast cancer who underwent sentinel lymph node biopsy, which proved positive in 21%. A subgroup of 77 sentinel node biopsy-positive patients underwent whole breast and nodal radiotherapy and systemic therapy and were prospectively followed.

The radiation regimen consisted of a total dose of 4,900 Gy delivered to the axillary and supraventricular basins in 25 fractions along with a 400-Gy axillary boost in most patients.

The systemic therapy employed was let up to each patient’s physician.

During a median 34-month follow-up, there has been just one axillary recurrence, for a 1.3% rate. It occurred 23 months after initial diagnosis of breast cancer. There have been three distant recurrences.

In terms of acute morbidity, patients were able to return to work and physical activities earlier following radiotherapy, compared with axillary dissection. No drain was required, seromas needing aspiration were rare, and there was marked less pain associated with radiotherapy than with surgical axillary clearance.

Arm circumference measurements showed no evidence of lymphedema at 2 years. Women with right-sided breast cancer experienced a mean 10% reduction in range of arm motion on the affected side, peaking at 6-9 months postoperatively and reverting to pretreatment status by 1 year. Patients with left-sided breast cancer had no decrease in range of motion.

Grip strength was significantly reduced in both hands of all patients at 2 years, the bilateral decrease suggested it was due to a global reduction in posttreatment physical fitness, Dr. Gadd said.

The vast majority of patients indicated their daily activities weren't affected at all by shoulder stiffness, arm numbness, pain, or arm swelling.

Asked if she believes axillary radiotherapy instead of axillary dissection in sentinel node biopsy-positive patients ought to be considered the new standard of care, Dr. Gadd replied that she would like first to see the Boston group's results in select other centers. On the other hand, I have to say we are now doing it off study. We are very confident in our ability to control disease.

“But to really identify which patients are best for this type of therapy, we need a bigger trial,” she added.