Breast cancer patients with positive sentinel nodes often not treated according to guidelines

By Victoria Stern

NEW YORK (Reuters Health) - Although the recommended care for breast cancer patients with sentinel lymph node micrometastases includes axillary lymph node dissection, almost half of patients do not receive it, according to a February paper in Archives of Surgery.

Axillary dissection "has important implications for proper cancer staging and prognosis and has the additional benefit of removing all disease from the lymph nodes," study author Dr. Nabil Wasif wrote in an email to Reuters Health.

The retrospective analysis included 5353 patients with sentinel node micrometastases in breast cancer treated from 1998 to 2005. Patient data came from the National Cancer Institute's Surveillance, Epidemiology, and End Results tumor registry.

The prevalence of sentinel node micrometastases increased from 2.5% in 1998 to 17.7% in 2005, according to Dr. Wasif and coauthors. All micrometastases were diagnosed with sentinel lymph node biopsy. Following the positive sentinel node biopsy, 59.6% of patients underwent axillary lymph node dissection, but the remainder had no further nodal surgery.

On average, patients who had axillary node dissection were significantly younger than those who did not (56.6 vs 60.2 years, $P<0.001$). Patients who had both procedures were also more likely to have larger tumors (mean, 1.8 vs 1.7 cm, $P = .002$) and higher tumor grade (33% vs 28%, P=. 001) and were less likely to be estrogen receptor-positive (85% vs 88%, $P = .003$).

At a median follow-up of 36 months, there was no significant difference in 5-year overall survival between patients who did or did not have axillary lymph node dissection (89% vs 90%).

"Nobody has shown conclusively that removing all sentinel lymph nodes is more beneficial to patient survival," Dr. Harold Bear, who was not involved in the study, told Reuters Health in a phone interview. In addition, axillary node dissection has a longer recovery and increases the risk for lymphedema and nerve damage. "There's a good reason" why some surgeons don't do axillary node dissections, Dr. Bear said. He is the head of the Breast Health Center at the Massey Cancer Center of Virginia Commonwealth University in Richmond.

Among the 3193 patients who had lymph node dissection, examination of nonsentinel nodes upstaged 18.6% to N1 disease, 2.2% to N2 and 0.1% to N3.

"For now axillary dissection for sentinel node micrometastases should remain standard, in accordance with the American Society of Clinical Oncology guidelines," said Dr. Wasif. Arch Surg 2010.