

## **Pathologic Node-Positive Disease in cT3N0 Patients Undergoing Mastectomy: Evaluation of Frequency, Multidisciplinary Approach to Management, and Recurrence**

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**Introduction.** Patients undergoing surgery first with cT1-2N0 disease with 1-2 positive sentinel lymph nodes may forgo axillary lymph node dissection (ALND). The approach to cT3 tumors is not well established. We hypothesized cT3N0 mastectomy patients may have varied ALND or radiation alone for node-positive disease, without axillary management tied to adjuvant recommendations.

**Methods.** Single center retrospective chart review of cT3N0 mastectomy patients (2/2016 to 7/2023) to evaluate clinical management of patients with pathologic node-positive disease.

**Results.** Analysis of 84 cT3N0 patients showed 50% ( $n = 42$ ) with node-positive disease. Thirty-five patients received ALND. Patients with positive sentinel lymph node biopsy (SLNB) after neoadjuvant chemotherapy (NACT) underwent ALND. SLNB alone was performed in nine surgery-first patients with node-positive disease. SLNB and ALND cohorts were clinicopathologically similar. Adjuvant radiation was more common in ALND (88% versus 54%,  $p = 0.001$ ), however, 81.6% of the SLNB cohort ( $n = 40$ ) was node-negative. ALND correlated with higher adjuvant chemotherapy ( $p = 0.02$ ) and endocrine therapy compliance ( $p = 0.04$ ). One patient had local regional recurrence (LRR) after SLNB with node-negative disease; no axillary recurrences occurred. Nine had metastatic recurrences (MR). Recurrence was not associated with SLNB versus ALND ( $p = 0.27$ ).

**Conclusions.** Many cT3N0 patients (52%) have node-positive disease on surgical pathology, with varied axillary surgical approaches. ALND remains standard of care for node-positive disease after NACT. ALND versus SLNB alone was not associated with LRR or MR but revealed statistically significant variations in adjuvant treatment. A multidisciplinary review is recommended for cT3N0 mastectomy patients with node-positive disease on pathology to assess the value of ALND in radiation and systemic therapy planning.