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IS SENTINEL LYMPH NODE BIOPSY SAFE FOR T3 AND T4 BREAST TUMORS? ANALYSIS OF A INSTITUTIONAL CASE SERIES AND SYSTEMATIC LITERATURE REVIEW

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Introduction: The presence and extent of axillary lymph node involvement represents an important prognostic factor, with an impact on therapy in breast cancer. The sentinel lymph node biopsy (SLNB) is an accepted modality for tumors T1 and T2 with negative axilla (N0), but many patients with T3–T4 tumors with N0 are often submitted to unnecessarily axillary lymph node dissection (ALND). There is a limited number of patients in published series, and selected cases may have axillary preservation. Thus, the objective of this study is to evaluate the negativity and safety of SLNB in T3 and T4 tumors, associated to the clinically N0, based on a series of institutional cases and a systematic review of the literature. **Materials and Methods:** A retrospective, observational study of patients treated for breast cancer at a tertiary cancer center between 2008 and 2015, with T3 / T4 tumors and N0 who underwent SLNB. A systematic review of literature was also carried out in 5 databases through the PICO methodology. **Results:** We analyzed 73 patients, 9 of whom were cT3 (after surgery they became pT2), 47 pT3 patients and 17 T4b patients. SLNB was identified in all cases and was negative for macrometastasis in 60.3% of the patients. With a mean follow-up time of 45 months, no ipsilateral axillary local recurrence was observed. In the systematic review, 504 articles were found, and only 7 presented data for analysis. Grouping these studies with the present series, it is observed that, among 374 T3 patients, the rate of N0 was 32.1%; for 41 T4b patients, the rate was 61.0%; for 431 patients grouping the whole series (T3 and T4), the rate was 32.5%. **Conclusions:** The performance of SLNB in T3/T4b tumors is feasible and a safe procedure from the oncological point of view, as it has not been associated with ipsilateral axillary relapse.