

Morbidity of selective lymph node biopsy for melanoma: meta-analysis of complications

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ABSTRACT

Background and aim. Intraoperative lymphatic mapping and selective lymph node biopsy is accepted worldwide as the standard procedure for staging regional lymph nodes of 1-4 mm thick melanomas, as well as for other neoplasms. Although it is often stated that selective lymph node biopsy is a minimally invasive procedure associated with few complications, few data exist concerning the morbidity associated with the procedure. The present analysis was performed to evaluate the morbidity associated with selective lymph node biopsy in a long-term follow-up.

Materials and methods. The study provides a review of 437 selective lymph node biopsies on 269 patients, operated on between the 1994 and the 2009, for the lymph node biopsy of head and neck, groin, axilla, upper and lower limbs and nodal basins. Patients' history and follow-up were reviewed for 2 weeks after surgery, every 3 months for the first 2 years, every 4 months during the third year, and every 6 months subsequently, and postoperative morbidity was evaluated.

Results. After sentinel node biopsy, 14 patients developed one of the following complications: hematoma, 1 case (0.30%); lymphedema, 1 case (0.30%); seroma, 2 cases (0.61%); wound infection, 6 cases (1.83%); keloid scar, 2 cases (0.61%); and postoperative pain, 2 cases (0.61%). The total complication rate was 4.26%.

Conclusions. Selective lymph node biopsy for melanoma, as for other tumors, in respect to radical lymphadenectomy, is not a complications-free procedure but is usually not severe.

Key words: melanoma, postoperative morbidity, radical lymphadenectomy, sentinel lymph node biopsy, sentinel lymph node.

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