RF-Sentinel Lymph Node Biopsy in Head and Neck Melanoma

FR-Biopsia Selectiva de Ganglio Centinela en Melanoma de Cabeza y Cuello


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Lymph node invasion is a factor for poor prognosis in melanoma and selective sentinel lymph node biopsy (SLNB) is the technique of choice for lymph node staging. Since 2012, most clinical practice guidelines recommend SLNB in melanomas at least 1 mm thick (in reality, in melanomas with a Breslow depth greater than 0.8 mm or with unfavorable prognostic factors such as ulceration) for patients with no clinical evidence of lymph node enlargement and without contraindications for the procedure. Although such biopsies have not been shown to specifically prolong survival, they enable early and more precise staging of patients, making many of them candidates for adjuvant treatment and so able to benefit from greater secondary survival. However, at times, adherence to the guidelines is limited, as shown in a recent study reporting that the recommendations concerning SLNB are followed in 39.7% of patients with melanoma. Site, sex, sage, race, and even socioeconomic factors seem to influence whether the procedure is performed.

Specifically, head and neck melanoma (HNM) is associated with low rates of SLNB. This may be attributed to several reasons:

1) The complexity and variability in lymph node drainage of the head and neck. Stewart and coworkers’ analyzed 269 patients with HNM and found that 25% of them had lymph node drainage to multiple basins, without detecting any differences between patients with lymph node drainage to single or multiple basin. It is therefore hard to predict which patients would be the most appropriate candidates for SLNB.

2) Difficulties with the technique and mapping of lymph nodes of the head and neck. Small lymph nodes and vessels and the location at a greater depth than other sites, as well as the need to preserve adjacent structures, make the technique more complicated than is the case for lymph nodes in the axilla or groin. Accidental damage to the sensory nerves, temporary paresis of the facial nerve after dissection of the parotid gland, and lesion of
the accessory spinal nerve with persistent weakness can all occur.

3) Greater rate of false negatives and recurrence in comparison with other sites. Data from 2610 patients included in the Sunbelt Melanoma Trial showed that the rate of false negatives in HNM was significantly greater than for melanoma located on the trunk and limbs (12%, 2%, and 3%, respectively). In an attempt to address this issue, a new technique has recently been described using indocyanine green as a sentinel lymph node marker in conjunction with the SPY Elite infrared imaging system. With this technique, a lower rate of false negatives was observed compared with the conventional technique.4

Recent studies on the use of SLNB and HNM analyzed survival among patients with positive and negative SLNB, and found differences between the 2 groups. Furthermore, Pavri and coworkers,5 in a retrospective study, observed that 92% of melanomas with negative lymphoscintigraphy prior to SLNB were HNM. Likewise, those patients with negative preoperative lymphoscintigraphy had a shorter disease-free survival compared with those with visible lymph nodes. These results highlight the need to perform a more exhaustive locoregional ultrasound in patients with HNM, particularly in those with negative lymphoscintigraphy.

In conclusion, there is a certain disagreement in the indications for SLNB in HNM. Randomized clinical trials would be necessary to determine whether this technique can improve survival in these patients.

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References