

Abstract

Background and Objectives

Guidelines for sentinel lymph node biopsy (SLNB) in primary cutaneous melanoma are still under debate. We wanted to see which factors other than Breslow Depth (BD) contribute the most to sentinel lymph node (SLN) metastasis in the hopes of giving clearer recommendations for SLNB. Ultimately, we want to prevent patients from undergoing any unnecessary procedures and limit any undue risk and harm.

Methods

We used EPIC and REDCAP to identify patients at University of Colorado Hospital (UCH) who underwent wide local excision (WLE) and SLNB and had evidence of SLN metastasis on pathology. We looked at multiple different factors such as demographics, ulceration, mitosis, margin involvement, and analyzed them using univariate analysis.

Results

318 patients were identified. 67/318 were patients with metastasis to the SLN. SLN metastasis positive (SLNP) and SLN metastasis negative (SLNN) patients differed significantly in age, ulceration, mitosis, deep margin, and lymphovascular involvement.

Conclusions

Younger age, presence of ulceration, presence of mitosis, involvement of the deep margins, and lymphovascular involvement are all strongly correlated with SLN metastasis and should be factors when recommending SLNB.