Dermal Melanoma: a rare subtype of melanoma

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Introduction

• Benign subcutaneous masses such as lipomas and cysts are common and often go untreated.
• Primary dermal melanoma may be clinically unrecognizable as an atypical melanocytic process because of its resemblance to a subcutaneous cystic or vascular process.
• The term primary dermal melanoma has been used to describe a subtype of melanoma confined to the dermis or to the subcutaneous tissue without evidence of trauma, regression, or systemic disease. (3)
• Here we present a case of a presumed lipoma, excised at the request of the patient, and found on pathology to be a dermal melanoma.

Case Presentation

• A 77 year-old male presented for excision of a flesh-colored subcutaneous tumor on his left upper arm present for six months and presumed to be a lipoma due to its appearance and his past history of multiple lipomas.
• Excision revealed a dermal/subcutaneous melanoma with out epidermal changes and consisting almost entirely of markedly atypical epithelioid cells growing in a sheet-like fashion. Marked pleomorphism was present with numerous mitotic figures.

• Immuno-peroxidase staining was positive for S-100 and Melan-A, and negative for CKAЕ 1/3, supporting the histopathologic diagnosis. The greatest thickness was 15 mm with deep margin involvement.
• Whole body PET scan showed left axillary metastasis without distant metastasis. MRI of the brain was negative for metastatic disease.
• Left axillary sentinel lymph node biopsy revealed metastatic melanoma and re-excision of the remainder of the tumor revealed a deep dermal/subcutaneous circumscribed melanoma with no melanoma in situ or upper dermal melanoma noted.
• The greatest thickness of the residual tumor was 25 mm, extending to within 1.2 mm of the deep margin with negative peripheral margins.
• Subsequent left axillary lymph node resection was negative for metastatic disease. Medical oncology recommended no adjuvant therapy. All subsequent PET and CT scans have not shown further evidence of metastasis.

Conclusion

• Primary dermal melanoma is a rare entity that represents less than 1% of all melanomas.
• Histologically, primary dermal melanoma appears identical to metastatic melanoma. (1)

• Dermal melanoma was originally considered in transit (stage IIIb) or stage IV melanoma, but is now recognized as a separate entity because of the significantly higher survival rate compared to stage III and IV melanoma.
• Outcomes in dermal melanoma correlate more closely with cutaneous melanoma of a similar thickness versus dermal metastasis with similar depth. (2)
• Management of dermal melanoma consists of wide local excision as well as a sentinel lymph node biopsy.
• Sentinel lymph node biopsy is a cost effective way to increase disease-free survival and has been associated with a lower recurrence rate. (4)
• A large case series of 83 patients demonstrated a positive sentinel lymph node biopsy was associated with a 5 year disease-free survival of 61% compared to lymph node negative 5-year survival of 81%. (2)
• A positive lymph node biopsy should be followed up with a complete lymph node dissection and discussion of adjuvant therapies.

References