21 Treatment of desmoplastic melanoma

Desmoplastic melanomas represent 1–3% of melanomas, occur in an older age group, and are more common on the head and neck.[1,2]

Histologically they are characterised by dermal spindle cells in a fibrous stroma. Compared to other melanomas, they present as thicker primary tumours and have an increased association with the lentigo maligna histogenetic subtype.[1,2] They are usually S100 positive on immunohistochemistry and often have a lymphocytic infiltrate. Nerve infiltration or neurotropism is found in 36–52%.[1,2] They are often amelanotic.[2]

When compared to melanomas of similar thickness, overall survival is no different.[1,2]

There is increased local recurrence when neurotropism is present.[2]

Recently desmoplastic melanomas have been further classified into 'pure', where greater than 90% of the melanoma is desmoplastic, and 'mixed', when less is present. There is some suggestion that the sentinel node biopsy procedure is less likely to be positive in the 'pure' subtype.[1,3] Multivariate analysis of variables affecting overall survival found Breslow thickness the most important indicator,[1,2] however, AJCC stage was also found to be a significant variable.[1]

Surgery is considered the treatment of choice for primary desmoplastic melanoma, with a minimum margin of one centimetre recommended.[1–3] Since these melanomas are more common on the head and neck, reconstruction by skin flap or skin graft is often required. The role of postoperative radiotherapy following excision of desmoplastic melanoma of the head and neck regions remains unclear.

Evidence summary	Level	Reference
Surgical treatment of primary desmoplastic melanoma has shown the most effective results to date	III–3	2

Recommendation

	Grade
1. Local wide excision for desmoplastic neurotropic melanoma conforms with the same margins as for other forms of cutaneous melanoma	C

References

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2. Quinn MJ, Crotty KA, Thompson JF, Coates AS, O'Brien CJ, McCarthy WH. Desmoplastic and desmoplastic neurotropic melanoma: experience with 280 patients. Cancer 1998; 83(6):1128–1135.
3. Pawlik TM, Ross MI, Prieto VG, Ballo MT, Johnson MM, Mansfield PF et al. Assessment of the role of sentinel lymph node biopsy for primary cutaneous desmoplastic melanoma. Cancer 2006; 106(4):900–906.