Management of Head & Neck Melanoma

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The principles of managing melanoma in various parts of the body are similar. Management in the Head Et Neck (H&N) is usually the most challenging.

Diagnosis & Staging of Melanoma

If melanoma is suspected, the changing skin lesion should be removed usually under local anaesthetic and sent for histology. This will confirm or refute melanoma and determine the extent of treatment required. The potential for metastatic spread is related to the dept of invasion and thickness of the lesion. Clark's level of invasion is determined by the extent of dermal invasion (Levels 1-5) and thickness is measured in millimeters by the pathologist. 10 year mortality as a function of the primary thickness is shown in Figure 1.

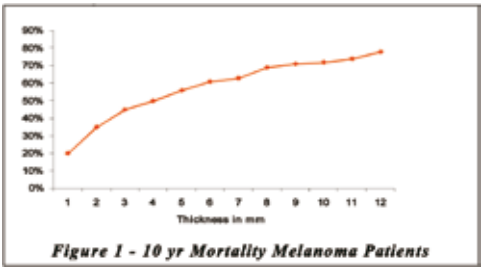

Figure 1 - 10 yr Mortality Melanoma Patients

Treatment

The extent of treatment for melanoma depends on the thickness of the lesion. Wide surgical excision is required. For in-situ lesions a 5 mm margin of clearance; for invasive lesions up to 1.0 mm thick, a 1 cm margin of clearance; whilst thicker lesions require 2 cm clearance. Melanoma's thicker than 1 mm have at least a 10% risk of lymph node involvement and a Sentinel Node Biopsy is indicated.

What is a Sentinel Lymph Node?

When malignant cells are released from a melanoma into the lymph system, they travel to one or two anatomically specific lymph nodes in the first instance: The 'Sentinel Node'. Removal of the sentinel node is at least 90% accurate in diagnosing lymph gland involvement and is now standard practice for managing melanomas thicker than 1 mm.

Sentinel Node Biopsy

The site of the Sentinel Node is determined by injecting Technetium; a radio-isotope into the primary wound. The tracer then moves to the sentinel lymph node that drains that particular area of skin and the sentinel node is detected by gamma counter and marked. (See Fig 2)

Blue dye is injected around the primary site which in turn drains to the sentinel lymph node. Then, under General Anaethesia the blue node is identified and resected. A sterile hand-held gamma detector is also used to aid detection of the node. The node is then sent for histology (parafin section).

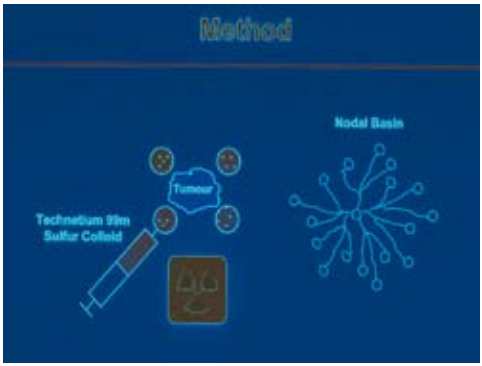

Figure 2: Sentinel Node Study

Lymph Node Dissection

If the sentinel node study is positive with melanoma, a node dissection is appropriate. In addition, for patients with palpable lymph nodes shown to be involved by fine needle aspiration (FNA) cytology, node dissection is also the treatment of choice.

Lymph gland involvement with H&N melanoma is to some degree predictable. Melanomas of the anterior scalp, face, and anterior neck usually spread to lymph nodes in the parotid (P) and/or the lymph nodes along the internal jugular vein at Levels 1-4. In contrast, posterior