

CASE SCENARIO 9

7/11/2020

A 35-year-old woman presents with a long-standing history of a pigmented lesion in her right lower leg. However, recently she has noticed this to be larger and growing in size. The lesion is itchy and has bled from the surface a few times.

Malignant Melanoma

Age: Very rare before puberty / Common in 20-30 yrs.

Sex: Equal in both / often in L.L. in women & trunk in men.

Ethnicity: Common in Caucasians / rare in Blacks / Fair complexion, red hair, and a tendency to freckle are more susceptible.

★ Cardinal Symptoms of Malignant Change in a mole:

- **Change in Surface:** one of the earliest signs

↳ Loss of skin creases over the mole. Skin may become rough & scaly.

- **Itching:** Early & significant symptom often associated with a pale-pink halo around the mole.

- **Increase in size, shape or thickness:**

Long-standing mole, or recently developed brown spot, has grown steadily over a period of a few weeks or months.

- **Change in colour:** M.M produce more melanin → Mole gets darker

- **Bleeding:** Slight & late sign overlying epithelium becomes anoxic & either ulcerates spontaneously or breaks down after minor injury.

- Evidence of local or distant spread :

The pigment produced by the malignant melanocytes may spread diffusely into the surrounding skin to produce a brown halo around the 1° lesion.

↳ **Satellite nodules** : small intradermal nodules around 1° lesion.

★ Clinical Types :

• **Superficial Spreading Melanoma** : Most common (70%).

May occur on any part of the body usually palpable but thin with an irregular edge and a variegated colour.

• **Nodular Melanoma** : (15%) More aggressive than SSM with a shorter clinical course. More common in men.

It's thick & protrudes above the skin. Has a smooth surface and a regular outline and may arise de novo. It may become ulcerated and then often bleeds.

• **Lentigo Maligna Melanoma** : previously known as "Hutchinson's Melanotic Freckle". (5-10%) Slow growing brown macule on the face, neck, or hands of the elderly. More in women. Due to prolonged sun exposure. Less metastatic potential than other variants.

• **Acral Lentiginous Melanoma** : Affects the sites of feet & palms of hands. Rare in whites (2-8%). More common in Afro-Caribbean, Hispanic, and Asian populations (35-60%).

Diagnosis:

Biopsy $\left\{ \begin{array}{l} \text{Excisional with 2-3mm margin} \\ \text{Incisional when excisional is disfiguring} \end{array} \right.$

- Frozen Section

- Sentinel Lymph Node Biopsy

Staging:

- Breslow Thickness: Most important prognostic factor in absence of L.N Metz. "Thickness from granular layer to lowest detectable tumor cell"

Stage 1: ≤ 1.0 mm \rightarrow Cure rate is over 95% with excision

Stage 2: 1.01 - 2.0 mm

Stage 3: 2.01 - 4.0 mm

Stage 4: ≥ 4.0 mm \rightarrow High risk lesions with poor cure rate

\rightarrow Intermediate but have risk of Metz

Clark Level: Penetration of the melanoma through the layers of the skin.

The American Joint Committee on Cancer (AJCC) Staging:
T.N.M Staging \rightarrow Now widely used

Treatment:

The gold standard is immediate, complete excision of the tumour with safety margins.

Safety margins according to Breslow's Thickness:

- in Situ Melanoma \Rightarrow 0.5 cm
- Melanoma < 1 mm deep \Rightarrow 1 cm
- Deeper Lesion \Rightarrow 2 cm

+ Lymph Node Clearance

+ Adjuvant Therapy:

• BRAF Kinase Inhibitor: (Vemurafenib / Dabrafenib)
Used in Metastatic or unresectable tumours that have "BRAF V600E" mutation

• Immunotherapy: Check point inhibitors (ipilimumab / Nivolumab) for metastatic or unresectable Melanomas positive for "PD-1" mutations.

Prognosis:

The presence of L.N metz is the single most important prognostic index in melanoma.

once Regional LN are clinically involved \Rightarrow 70-85% pts will have occult distant metz.