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

{DermaNZ}

DDx of pigmented skin lesion

≠ The color of pigmented skin lesions is due to
- melanin
- Blood
- Exogenous pigment (eg tattoo)

pigmented skin lesions

≠ Most commonly → melanocytic

however, non-melanocytic lesions can also be pigmented especially in dark skinned individuals

≠ non-melanocytic lesions e.g
1. Keratinocytic lesions
2. vascular
3. Reactive.

• Most fitting diagnosis in this case ~~?~~

Malignant melanoma

~ arising from pre-existing naevus

≠ Malignant Melanoma

- Arise in pre-existing nevi (junctional or compound with junctional component)
- ⭐⭐⭐ In white people over sun-exposed areas (High incidence in legs of fair skinned ladies)
  - Rare in dark-skinned people
  - pre-malignant form → Lentigo maligna

Presentations

- Superficially spreading melanoma
  - ~ more common
  - ~ Surface has patches of deep pigmentation
- Nodular melanoma
  - ~ nodular
  - ~ poor prognosis
  - ~ early lymphatic involvement

- Other less common forms
  1. Lentigo maligna
  2. Acral melanoma
  3. Mucosal melanoma
  4. Choroid melanoma
  5. Amelanotic melanoma

Signs of malignant change in Melanoma

1. increase or irregularity in size
2. " " in pigmentation
3. Bleeding or ulceration
4. Spreading of pigment from the edges of nevus.
5. itching or pain
6. Formation of daughter or satellite nodules
7. Lymph node or distant spread.

Spread

1. Local growth ± ulceration
2. Lymphatic permeation
   - Cutaneous nodules by progressive proximal spread
   - Lymphatic emboli to regional LNs
3. By blood
   - generalized skin pigmentation
   - Melanuria (late)

staging

~ the prognosis of MM depend mainly on the degree of invasion, which is determined by the depth of invasion

- In Reference to normal skin layers (Clark's level)
- According to its measured depth (Breslow depth)

Simpler & more accurate

TREATMENT OF PIGMENTED LESIONS

1) Prophylactic Removal

* a) of any nevi subjected to trauma (most commonly image malignant transformation) — including, ulcers, scabs & genitalia.
  b) Removal for cosmetic reasons
  c) Removal if the patient is acutely anxious about their presence.

∴ Remove the entirety of the lesion (not like local excision)
∴ Send for histopathology.

2) Suspicious naevi

a) naevi showing any signs of malignant transformation are removed for histopathological examination.
— if results come back for Malignant melanoma
)

Wide local excision
with safe (free) margin
~ proportional to depth
(Breslow Depth)

a centimeter for every millimeter of invasion

+ skin grafting

3] Sentinel lymph NOs.

- identified through injection of vital blue dye over the primary melanoma & performing Pre-operative lymphoscintography

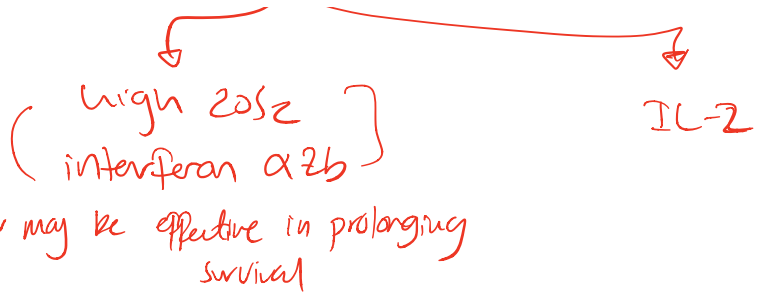
→ sent for histopathology if +ve involvement

Regional LNs are removed by [Block Dissection]

4] Adjuvant Therapy

- MM deposits regress following excision of the primary lesion suggesting an immunological component

→ IMMUNOTHERAPY



- may be effective in prolonging survival

(V) MM are radioresistant
(V) chemotherapy results are disappointing.

[FIVE YEAR SURVIVAL ACC. TO BRESLOW DEPTH]

Depth	5-year Survival	
• < 0.75 mm	> 95%.	} good Prognosis < 1.5mm
• 0.75 – 1.5 mm	90%.	
• 1.5 – 4.0 mm	70%.	
• > 4.0 mm	< 50%.	

- PROGNOSIS

① Breslow depth — most important prognostic factor of primary lesion
- measured vertically from granular layer to deepest point of tumor invasion.

② Type of lesion
- Superficial spreading better prognosis than Penetrating nodularing.

③ The anatomical site

- Tumors of trunk & scalp have a poor prognosis

④ Lymph Node metastases

- carry poor prognosis, more so if there are cutaneous deposits

≠ presence of sentinel LN, or satellite lesion reduce the 5-year survival to < 30%. ✱✱

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- References ✱
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