

Malignant melanoma

• Definition → Malignant tumour arising from epidermal melanocyte

• Incidence →

- The commonest skin tumour causing death, incidence ↑ especially in sunny countries & Western areas (deceptive deeper layer)
- Affects males > females (30-60yrs)

• Predisposing factors →

1. Prolonged exposure to sun (UV-B) → most important cause
"NB: the UVA is not carcinogenic as it is ~~not~~ not absorbed by skin, UV-C is highly destructive absorbed by ozone layer"
2. Exposure to radiation (α-ray, ionizing radiation)
3. Pigmented skin lesions "e.g. chronic scars, sinus, pigmented naevi, leukoplakia, albinism, xeroderma pigmentosa"
4. Carcinogenic e.g. tar, wood dust
5. Immunological deficiency or suppression
6. Nevi present in palm & sole or Giant nevi "which is large nevi occupying large area of skin"
7. Dysplastic nevi syndrome
8. Junctional nevi "is presence of melanine pigment in junction between epidermis & dermis"
9. Compound nevi → it's intradermal nevi + junctional nevi

NB: malignant melanoma may arise on top of benign naevus

NB: 5% of all melanomas are familial

Criteria of malignant transformation of benign naevus are →

• Major Criteria

1. ↑ in size > 5mm "rapid ↑ in size"
2. ↑ in pigmentation "Darkening of color"
3. change in shape. "Border irregularity"

• Minor Criteria

4. Ulceration & bleeding, itching
5. become painful & indurated base of naevus
6. Hard enlarged LN.
7. loss of hair
7. fixity & ulcer

Clinical types of Malignant melanoma →

1] Superficial Spreading melanoma:

- most common type "64%."
- commonly affect middle age group
- affect any part of body.
- Macro- (N/E) : raised expanding pigmented lesion (> 5mm),
irregular edges, & more than 1 color.
- Prognosis variable.

2] Nodular Melanoma:

- account 12 - 25%.
- more affect young age group
- affect any part of body
- N/E → Nodular lesion, uniform color (blue, grey or black),
very liable to ulcerate & bleed. Irregularly defined irregular edges
- it has bad prognosis "most malignant"

3) Lentigo MM : LMM

- 1-15%
- affect more elderly people
- usually affect face
- N/E → flat brown macule, very slow grow even SCM, \bar{E} very irregular edges (characteristic), superficial
- Good Prognosis "Least malignant"

4) Acral lentiginous melanoma :

- Rare "common in Asia"
- usually affect palm & sole
- expanding irregular pigmentation
- slowly growing
- Poor Prognosis

5) Amelanotic melanoma :

- Rare
- Uniform pink lesion \pm LN mets
- it has worst Prognosis "v. poor"
- diagnosed by biopsy

6) Mucosal melanoma

- found in oral cavity, anal, choroid

7) Metastatic melanoma

- ~~sat~~ Satellites around nodule
- In-transit "during LN mets"

N:B Subungual melanoma is type of acral melanoma found in nail or around nail fold → nail destruction

Micro: spindle cells, epithelioid cells, Polymorphous cells

Spread →

1. Local: to surrounding tissues, start radial growth phase (intraepithelial) then invade dermis (vertical growth phase)

2. Lymphatic: to LN by permeation & embolization

3. Blood: "Very rare" to lung, liver, brain & late to bone (LLBB)

-The 2ndry are usually black deposits.

Classification

- Breslow classification "depend on thickness of tumor"

Stage I : $< .75$ mm

Stage II : $.75 - 1.5$ mm

Stage III : $1.5 - 2.25$ mm

Stage IV : $2.25 - 3$ mm

Stage V : > 3 mm

Investigations

↳ Only sure method is biopsy & histopathology

Treatment

1. Surgical excision @ safe margin (5cm)
2. regional LN excision
3. If there is Mets → chemotherapy, interferons, & interleukins