

# Skin and Soft Tissue Tumors



COLOR GUIDE: • Females' Notes • Males' Notes • Important • Additional • Raslan



# Skin and Soft Tissue Tumors

# Arise from any histological structures that make up skin:

- Epidermis
- Connective tissue
- Glands
- Muscle
- Nerves

# **CLASSIFICATION:**

- 1. Benign (excessive amount of normal tissue with no mitotic figures)
- 2. Premalignant
- 3. Malignant (excessive amount of abnormal tissue with a lot of mitotic figures)

# Common Benign Tumors

## 1. HEMANGIOMA:

- It is the commonest skin tumor, and the commonest benign tumor of infancy.
- It is classified based on the likelihood of proliferation or regression to:
  - Involuting; will regress on its own.
  - Non-involuting; won't regress on its own.

### Note(s):

Both benign tumors and hamartomas are composed of normal cells in excessive quantities, but benign tumors have a normal arrangement whereas hamartomas have an abnormal arrangement of cells.

# A. INVOLUTING HEMANGIOMA (HEMANGIOMA OF CHILDHOOD):

- It makes up to 95% of all hemangiomas.
- It is a neoplasm of endothelial cell origin, i.e. it is a hamartoma, not a true neoplasm.
- Presents at birth or during the first 2-3 weeks after birth, and grows rapidly for 4-6 months.
- Undergoes complete spontaneous slow involution; usually completely disappears at the age of 5-7 years.



### Note(s):

In involuting hemangioma, the deeper they go the bluer they become, whereas the more superficial the more cherry red they get.

Superficial (very superficial in the dermis)	Combined (Combined dermis and deep dermis)	<b>Deep</b> (cavernous hemangioma)
<ul><li>Strawberry nevus</li><li>Nevus vasculosa</li><li>Capillary heamangioma</li></ul>	<ul> <li>Strawberry</li> <li>Capillary &amp; Cavernous</li> </ul> Appears as a firm bluish	<ul> <li>Cavernous</li> <li>1. Appears as a blue tumor covered by</li> </ul>
Appears as a sharp demarcated, red, slightly raised lesion with an irregular surface.	tumor, may extend deeply into subcutaneous tissues.	normal skin.

**Treatment:** No need for treatment, just observe, (explain the pathology to the parents and assure them that it is not a genetic problem, also advice them to try avoiding trauma by cutting the nails of their child. If trauma happen it will bleed profoundly >> tell them to apply pressure & take their child to the hospital)

unless it involves a vital organ or interferes with physiological functions, e.g. eyelid. (If the tumor comes on the upper eyelid the eyelid becomes big very fast and also very heavy > the patient can't open his/her eye if the brain is not exposed to light very early in life it will completely neglect the eye and eventually will lead to blindness despite having a normal eye and

cornea and normal optic nerve >> so we have to surgically intervene)

### **Classification:**

# **B. NON-INVOLUTING HEMANGIOMA:**

- True benign tumors.
- Usually present at birth.
- There is no rapid growth phase; its growth is proportional to the growth of the child.
- Persists to adulthood.
- Causes severe aesthetic (cosmetic) problems.
- May cause arterio-venous fistulas eventually leading to cardiac failure.

#### Treatment: Not satisfactory.

# C. PORT WINE STAIN:

- An extensive intradermal hemangioma, just below the epidermis, which is mostly made up of a collection of dilated venules and capillaries. It has a deep purple red color.
- May involve any portion of the body, usually as flat patches in the face.
- Usually follows the correlation of sensory branches of the 5<sup>th</sup> nerve; so if it involves one branch of the trigeminal, it will spread to half of the face, whereas if it involves both branches it will spread to the whole face.
- Microscopically, it appears as thin walled capillaries distributed throughout the dermis, lined by thin mature flat endothelial cells.
- Lesions in the 5<sup>th</sup> cranial nerve dermatome (ophthalmic division- VI) may be seen in association with meningeal involvement (Sturge-Weber syndrome), Which may cause focal epilepsy. Similar lesions may be seen in the Klippel-Trenaunay syndrome. (Churchill's book)

#### Treatment: Unsatisfactory.

- Tattooing.
- Radiotherapy: causes a scar as it destroys both blood vessels and the skin overlying the lesion.
- Laser: has a special wavelength affecting the blood vessels without affecting the skin, but it is expensive. (casused a big improvement in the treatment)

#### Note(s):

There are many type of lasers & each one has a function. Laser can affect 3 things: 1- normal pigment of the skin. (e.g. used in hair removal) 2- water "CO2 lasers" (e.g. used for surgical cuts) 3- hemoglobin "qswitched tunable laser; has a wavelength of 570-600 nanometer" (which is

the one used here)

### <u> Malignant Tumors</u>

# 1. BASAL CELL CARCINOMA (RODENT ULCER):

- The most common malignant cancer of all skin tumors.
- Growth is slow (not aggressive), steady & insidious (painless). Several years may pass before patient becomes concerned.



- Invade adjacent tissue (Locally invasive), which may lead to massive ulcerations.
- Very rare to metastasize & death may occur by invading deeper tissues or by extension into intracranial or major blood vessels (e.g. cavernous sinuses)
- Mostly presents in the face and the neck.

#### Predisposing factors:

- Age >40 years (because the immunity decreases as we get older) and men are more affected than women.
- Ultraviolet light exposure through sunlight (damages the DNA) e.g. live in tropical areas.
- Fair skin, blond hair & blue eyes living in tropical climate i.e. westerners living in Saudi Arabia.
- Others; immunosuppression, radiotherapy, xeroderma pigmentosum and naevus sebaceous.

Appearance: (usually multiple because different areas are affected)

- Small (sometimes stays for 20-30 years) translucent, skin elevated nodule
- Rolled pearly edges
- Telangiactic vessels may occur on the surface
- Flat and white or waxy appearance with firm palpation

• Histologically, it appears as elongated strains of basal cells that infiltrate the dermis.

### Based on appearance, there are different forms:

Sclerosing Morphia	<ul> <li>Less common</li> <li>Elongated strands of basal that infiltrate the dermis</li> <li>Flat &amp; whitish or waxy appearance and firm palpation</li> </ul>	
Erythromateo us (superficial) BCC	<ul> <li>Body basal occurs most frequently on the trunks.</li> <li>Appears as reddish plaques with atrophic center, and smooth, slightly raised borders</li> <li>good prognosis, treatable (follow-up is required)</li> </ul>	
Pigmented BCC	<ul> <li>Sometimes mistaken for melanoma, but it is darker</li> <li>frequent in our country</li> <li>Extends deep to the subcutaneous tissue</li> </ul>	
Nodular basal	cell carcinoma	
Cystic basal cell carcinoma		

### Treatment:

Radiotherapy:

Good in treatment of structures that are difficult to reconstruct but hospitalization is not required. Should not be used in patients under 40 years (due to mutation), or in patients who failed to respond to radiation therapy. Treatment usually lasts 4-6 weeks

The more well differentiated the tumor the more radio-resistant it is. And the more undifferentiated the tumor the more radiosensitive it is. (So it's better to have histopathological results before starting treatment)

Curettage & Electro-desiccation (cautery):

Excise a safety margin of 2-3 mm.

Surgical excision (the best treatment):

Small moderate sized lesions, with removal of the subcutaneous tissue and do reverse face-lift flab if the lesion occurs in the face.

# 2. SQUAMOUS CELL CARCINOMA:

- 1st most cancer in dark skinned people
- 2nd most cancer in light skinned group
- There is a potential for metastatic spread
- The causative agents are the same as basal cell carcinoma, along with:
- Chronic contact with hydrocarbons such as tar, gasoline, and paints. (i.e. occupational hazard related)
- Exposure to ionizing radiation.
- Chronic ulcers.
- Scars of thermal bums healed repeatedly by fibrosis (especially if it was over a joint), which may lead to Marjolin's ulcer.
- Most common sites are the face & neck (e.g. ears, cheeks, and the lower lip) & back of the hands.
- These are aggressive tumors, does not usually metastasize, as fibrosis & initial burns has already destroyed lymphatic.

#### Presentation:

- Locally invading without metastasizing.
- Premalignant tumors as Bowen's disease or chronic radiation dermatitis.
- Rapidly growing, widely invasive with metastasizes especially squamous tumors arising from normal skin.
- Grows initially starts as an erythomatous plaque or nodule with indistinct margins.
- Surface may be: flat, verocous (warty), ulcerative
- Histopathology: malignant epithelization is seen extending down into the dermis like horns of pearls, which is not seen in basal cell carcinoma.

### Treatment:

• <u>Surgery</u> Surgical excision with 4-5 mm safety margin in all directions.

### Note(s):

- Marjolin's ulcers are malignant tumors arising in chronic wounds, they include carcinomas that transform from the chronic open wounds of pressure sores or burn scars. - E.g. full thickness burn

healed by fibrosis goes on for 30 years leading to the development of Marjolin's ulcer

#### Note(s):

Sarcomas metastasize through blood, while carcinomas metastasize through lymphatics.

#### <u>Radiation</u>

\_The more well differentiated the tumor, the more it resembles normal skin, the less potential to metastasize, and the less radio-sensitivity, and vice versa.

# 3. MALIGNANT MELANOMA:

(there is nothing called benign melanoma! ONLY malignant)

- Incidence is over 300,000 of skin tumors every year in USA, 9000 of these are melanomas, i.e. 4.6%.
- 2/3 of all skin tumor deaths are from melanomas.
- Incidence of and survival also were increased from 41% to 67%.
- Whites have a higher incidence than blacks, but there is NO sexual predominance.
- Risk factors: UV radiation & family history.
- Average person has 15-20 nevi.
- 1/3 of all melanomas arise from pre-existing pigmented nevi.

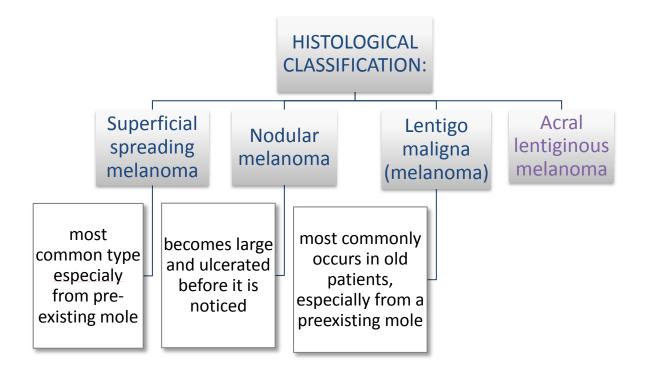
### Types of Nevi: (nevus = pigmented tissue)

Junctional Nevi	Intradermal Nevi	<b>Dysplastic Nevi</b> (5-12 mm)
<ul> <li>Arise from the junctional layer, which is the dividing layer of the skin</li> <li>Are small, circumscribed, light brown or black colored, flat – slightly raised &amp; rarely contains hair.</li> <li>Mainly lies between dermis &amp; epidermis.</li> <li>May be found in mucous membrane, genitalia, soles &amp; palms.</li> <li>More likely to become malignant.</li> </ul>	<ul> <li>Small spots, color range from blue to bluish black</li> <li>Flat &amp; dome shaped</li> <li>Compound; found in both dermis and epidermis</li> <li>Less likely to become malignant.</li> </ul>	<ul> <li>Pink base with indistinctive irregular edges</li> <li>Usually have embryonic tissues, i.e. ectoderm, mesoderm, or endoderm</li> <li>Most dangerous type in newborns</li> <li>Family history is important.</li> <li>Most lesions are small, and suspicious lesions must be excised.</li> <li><u>Congenital:</u> excision in 1% of newborns also with dysplastic is considered to be premalignant.</li> </ul>

### Factors that suggest melanoma from mole:

- Color: focal shades with red blue, white or darkening in color.
- Size: recent rapid diameter enlargement of more than 10 mm.
- Shape: irregular margins, notching and indentation.
- Surface: ulceration, bleeding, crusting, irregular elevation.
- Symptoms: pruritus, inflammation and pain
- Location: back, lower extremities, location is subjected to <u>BANS</u> area;
   <u>Back</u>, posterolateral part of the <u>Arm</u> posterolateral part of the <u>Neck</u> and <u>Scalp</u>; they are the anatomical areas that have a higher risk rate and a lesser survival rate.
- (High-risk areas and poor survival rate "worst prognosis"). Nevi on palms, soles, and genitalia should also be removed because they are considered premalignant.

# Classification of Melanoma based on histology:



# Staging (Clark's classification):

- Based on the histologic level of invasion of the tumor.
- Performed after excisional biopsy.

Level	Feature	Mortality & morbidity rates
I	In situ; above basement membrane (confined to the epidermis)	0%
II	Invades the papillary layer of the dermis	4%
III	Lesions reach the junction of the papillary and reticular layers	33%
IV	Lesions invades the reticular dermis	61%
V	Lesion invades subcutaneous tissue	78%

The doctor said that there is other classification of melanoma that we should read about it called Breslow classification, which determines the stage of malignant melanoma by the vertical thickness of the lesion in millimeters.

## Node dissection:

#### Advised prophylactically as:

- Level I and II: no need of dissection.
- Level III: some will do it and some will not.
- Level IV and V: dissection is mandatory.

#### Not advisable in:

- Lymphatic drainage of sites involved (e.g. if there's a melanoma involving the breast, you can't simply excise all of the lymphatics groups!)
- Patients over 70 years old. (they will usually die from other disease before they die from metastasis)
- Serious concurrent disease.
- Unresectable distant metastasis. (because the disease is already spread and there will be no benefit from dissection)

### Prognosis:

- Depends on the tumor size and depth of invasion. (Most important)
- Less than 2 cm in diameter and less than 0.7 mm in depth is curable by wide local excision.
- Nodular melanoma with ulceration has a poor prognosis.
- Lesions in the extremities have a better prognosis than trunk lesions. (because if the lesion was on the extremities we can amputate the involved extremity, but if it was on the trunk we can't amputate it)
- Women have a better 5 years survival rate than men.

### Nonsurgical treatment (immunotherapy):

- Small metastatic lesions treated with BCG may be tried on healthy patients.
- Melanoma is radioresistant; so radiotherapy is rarely used for definite treatment and maybe used in palliation.
- Chemotherapy with phenylalanine and alanine-mustard and other drugs.
- Survival is better in limbs because a limb can be isolated and treated
- Long-term palliative treatment of large lesions, which underwent surgery, is with radiotherapy and chemotherapy.

### SUMMARY

- 1. Skin and Soft Tissue Tumors are classified into: benign, premalignant, and malignant.
- HEMANGIOMA: is the commonest skin tumor, and the commonest benign tumor of infancy. It is classified into Involuting; which is not a true neoplasm and will regress on its own. Non-involuting; which is a true benign tumor and will not regress on its own.
- 3. PORT WINE STAIN: an extensive intradermal hemangioma, may involve any portion of the body, and usually follows the correlation of sensory branches of the 5th nerve.
- BASAL CELL CARCINOMA: most common malignant cancer of all skin tumors, grows slowly and is very rare to metastasize. <u>Risk factors:</u> >40 years, UV light exposure, and fair skin, blond hair & blue eyes living in tropical climate. <u>Treatment</u>: Radiotherapy (the more well differentiated the tumor the more radio-resistant it is) - Curettage & Electro-desiccation (excise a safety margin of 2-3 mm) - surgical excision (the best treatment)
- 5. SQUAMOUS CELL CARCINOMA: The second most common cancer in light skinned people, but the first in dark skinned ones. There is a potential for metastatic spread. <u>Risk factors:</u> same as BCC in addition to Chronic contact with hydrocarbons, exposure to ionizing radiation, chronic ulcers, and scars of thermal bums healed repeatedly by fibrosis. <u>Treatment:</u> surgery (surgical excision with 4-5 mm safety margin in all directions) – Radiation
- 6. MALIGNANT MELANOMA: <u>*Risk factors*</u>: UV radiation & family history. Types of Nevi:
- o Junctional nevi: (more likely to become malignant)
- o Intradermal nevi: (less likely to become malignant)
- Dysplastic nevi: (most dangerous type), family history is important.

High-risk areas with poor survival rates is subjected to BANS area (<u>B</u>ACK, POS. LAT OF <u>A</u>RM, POS LAT <u>N</u>ECK, <u>S</u>CALP)

Staging of melanoma can be done using Clark's classification & Breslow classification.

IMPORTANT NOTES FROM SURGICAL RECALL			
	Notes		
SQUAMOUS	Risk factors:		
CELL	Sun exposure, pale skin, chronic inflammatory process,		
CARCINOMA	immunosuppression, xeroderma pigmentosum, arseni		
	What is a precursor skin lesion? Actinic keratosis		
	Signs & symptoms: Raised, slightly pigmented skin lesion;		
	ulceration/exudate; chronic scab; itching		
	Dreaded sign of metastasis: Palpable lymph nodes		
	(remove involved lymph nodes)		
	Treatment:		
	<ul> <li>Small lesion: Excise with 0.5-cm margin</li> <li>Large lesion: Resect with 1- to 2-cm margins of normal</li> </ul>		
<b>BASAL CELL</b>	tissue (large lesions may require skin graft/flap) <b>Risk factors:</b>		
CARCINOMA			
CARCINUMA	xeroderma pigmentosum		
	Signs & symptoms: Slow-growing skin mass (chronic,		
	scaly); scab; ulceration, with or without pigmentation,		
	often described as "pearl-like"		
	Treatment:		
	- Resection with 5-mm margins (2-mm margin in		
	cosmetically sensitive areas)		
MELANOMA	- Melanoma is the most common fetal skin cancer		
	- All melanoma are malignant.		
	Patient at greater risk to have melanoma:		
	White patients with blonde/red hair, fair skin, freckling,		
	a history of blistering sunburns, blue/green eyes,		
	actinic keratosis		
	<b>Most common site of melanoma (SEA):</b> S= skin, E=eyes, A= anus		
	- Most common type of melanoma is superficial		
	spreading		
	- Melanoma is the most malignancy that can		
	metastasize to the bowel		
	Treatment:		
	- Digital melanoma: Amputation		
	- Palpable lymph node metastasis: Lymphadenectomy		

# Questions from surgical recall

#### What are the most common skin cancers?

- 1. Basal cell carcinoma (75%)
- 2. Squamous cell carcinoma (20%)
- 3. Melanoma (4%)

#### What is the most common fatal skin cancer?

Melanoma

#### What is malignant melanoma?

A redundancy! All melanomas are considered malignant!

### SQUAMOUS CELL CARCINOMA

#### What is it?

Carcinoma arising from epidermal cells

#### What are the most common sites?

Head, neck, and hands

#### What are the risk factors?

Sun exposure, pale skin, chronic inflammatory process, immunosuppression, xeroderma pigmentosum, arsenic

#### What is a precursor skin lesion?

Actinic keratosis

#### What are the signs/symptoms?

Raised, slightly pigmented skin lesion; ulceration/exudate; chronic scab; itching

#### How is the diagnosis made?

Small lesion—excisional biopsy

Large lesions—incisional biopsy

#### What is the treatment?

Small lesion (\_1 cm): Excise with 0.5-cm margin

Large lesion (\_1 cm): Resect with 1- to 2-cm margins of normal tissue (large lesions may require skin graft/flap)

#### What is the dreaded sign of metastasis?

Palpable lymph nodes (remove involved lymph nodes)

#### What is Marjolin's ulcer?

Squamous cell carcinoma that arises in an area of chronic inflammation (e.g., chronic fistula, burn wound, osteomyelitis)

#### What is the prognosis?

Excellent if totally excised (95% cure rate); most patients with positive lymph node metastasis eventually die from metastatic disease

What is the treatment for solitary metastasis? Surgical resection

# BASAL CELL CARCINOMA

#### What is it?

Carcinoma arising in the germinating basal cell layer of epithelial cells What are the risk factors? Sun exposure, fair skin, radiation, chronic dermatitis, xeroderma pigmentosum What are the most common sites? Head, neck, and hands What are the signs/symptoms? Slow-growing skin mass (chronic, scaly); scab; ulceration, with or without

pigmentation, often described as "pearl-like"

#### How is the diagnosis made?

Excisional or incisional biopsy

#### What is the treatment?

Resection with 5-mm margins (2-mm margin in cosmetically sensitive areas) **What is the risk of metastasis?** 

Very low (recur locally)

# <u>Melanoma</u>

#### What is it?

Neoplastic disorder produced by malignant transformation of the melanocyte; melanocytes are derived from neural crest cells

#### Which patients are at greatest risk?

White patients with blonde/red hair, fair skin, freckling, a history of blistering sunburns, blue/green eyes, actinic keratosis

Male > female

#### What are the most common sites (3)?

1. Skin 2. Eyes

3. Anus (Think: SEA \_ Skin, Eyes, Anus)

#### What is the most common site in African Americans?

Palms of the hands, soles of the feet (acral lentiginous melanoma)

#### What characteristics are suggestive of melanoma?

Usually a pigmented lesion with an irregular border, irregular surface, or irregular coloration, other clues: darkening of a pigmented lesion, development of pigmented satellite lesions, irregular margins or surface elevations, notching, recent or rapid enlargement, erosion or ulceration of surface, pruritus

#### What are the "ABCDs" of melanoma?

Asymmetry	Border irregularity
Color variation	Diameter _6 mm and Dark lesion

#### What are the associated risk factors?

Severe sunburn before age 18, giant congenital nevi, family history, race (White), ultraviolet radiation (sun), multiple dysplastic nevi

#### How does location differ in men and women?

Men get more lesions on the trunk; women on the extremities

#### Which locations are unusual?

Noncutaneous regions, such as mucous membranes of the vulva/vagina, anorectum, esophagus, and choroidal layer of the eye

#### What is the most common site of melanoma in men?

Back (33%)

# What is the most common site of melanoma in women?

Legs (33%)

#### What are the four major histologic types?

- 1. Superficial spreading
- 2. Lentigo maligna
- 3. Acral lentiginous
- 4. Nodular

#### Define Superficial spreading melanoma?

Occurs in both sun-exposed and non-exposed areas; **most common** of all melanomas (75%)

#### Define Lentigo maligna melanoma?

Malignant cells that are superficial, found usually in elderly patients on the head or neck Called "Hutchinson's freckle" if Noninvasive Least aggressive type; very good prognosis, Accounts for \_10% of all melanomas

#### Define Acral lentiginous melanoma?

Occurs on the palms, soles, subungual areas, and mucous membranes Accounts for \_5% of all melanomas (most common melanoma in African American patients; \_50%)

#### Define Nodular melanoma?

Vertical growth predominates, Lesions are usually dark, Most aggressive type/worst prognosis, Accounts for \_15% of all melanomas

#### **Define Amelanotic melanoma**?

Melanoma from melanocytes but with obvious lack of pigment

#### What is the most common type of melanoma?

Superficial spreading (\_75%) (Think: SUPERficial \_ SUPERior)

#### What type of melanoma arises in Hutchinson's freckle?

Lentigo maligna melanoma

#### What is Hutchinson's freckle?

Lentigo maligna melanoma in the radial growth phase without vertical extension (noninvasive); usually occurs on the faces of elderly women

#### What are the American Joint Committee on Cancer (AJCC) stages simplified:

- **IA?** < 1 mm without ulceration
- **IB?** < 1 mm with ulceration or 1–2 mm without ulceration
- **IIA?** 1–2 mm with ulceration or 2–4 mm without ulceration
- **IIB?** 2–4 mm with ulceration or \_4 mm without ulceration
- **IIC?** > 4 mm with ulceration
- III? Positive nodes
- IV? Distant metastases

#### What are the common sites of metastasis?

Nodes (local)

Distant: lung, liver, bone, heart, and brain

Melanoma has a specific attraction for small bowel mucosa and distant cutaneous sites

Brain metastases are a common cause of death

#### What are the metastatic routes?

Both lymphatic and hematogenous

#### How is the diagnosis made?

Excisional biopsy (complete removal leaving only normal tissue) or incisioned biopsy for very large lesions

(Note: Early diagnosis is crucial)

#### What is the role of shave biopsy?

No role

#### What is the "sentinel node" biopsy?

Inject Lymphazurin<sup>®</sup> blue dye, colloid with a radiolabel, or both around the melanoma; the first LN in the draining chain is identified as the "sentinel lymph node" and reflects the metastatic status of the group of lymph nodes

#### When is elective lymph node dissection recommended?

Controversial—possible advantage in melanomas 1 to 2 mm in depth but jury still out; sentinel node biopsy if \_1 mm is becoming very common

#### What is the treatment for digital melanoma?

Amputation

#### What is the treatment of palpable lymph node metastasis?

Lymphadenectomy

#### What factors determine the prognosis?

Depth of invasion and metastasis are the most important factors (Superficial spreading and lentigo maligna have a better prognosis because they have a longer horizontal phase of growth and are thus diagnosed at an earlier stage; nodular has the worst prognosis because it grows predominantly vertically and metastasizes earlier)

What is the workup to survey for metastasis in the patient with melanoma? Physical exam, LFTs, CXR (bone scan/CT/MRI reserved for symptoms) What is the treatment of intestinal metastasis? Surgical resection to prevent bleeding/obstruction Which malignancy is mostlikely to metastasize to the bowel? Melanoma What is the surgical treatment of nodal metastasis? Lymphadenectomy What is FDA-approved adjuvant therapy? Interferon alpha-2b (for stages IIB/III) What is the treatment of unresectable brain metastasis? Radiation What is the treatment of isolated adrenal metastasis? Surgical resection What is the treatment of isolated lung metastasis? Surgical resection What is the most common symptom of anal melanoma? Bleeding What is the treatment of anal melanoma? APR or wide excision (no survival benefit from APR, but better local control) What other experimental therapy is available for metastatic disease? 1. Monoclonal antibodies 2. Chemotherapy (e.g., dacarbazine)

#### 3. Vaccinations

#### What is the median survival with distant metastasis?

6 months

# Questions

- 1) According to Clark's classification invasion of papillary layer in malignant melanoma is:
  - a. Clark 1
  - b. Clark 2
  - c. Clark 3
  - d. Clark 4
  - e. Clark 5

### 2) Basal cell Carcinoma:

- 4. Metastasis is usually to Lymph nodes before systemic Metastasis
- 5. Metastasis is usually systemic before lymph nodes Metastasis
- 6. Metastasis is usually to both lymph nodes and systemic Metastasis at the same time
- 7. Metastasis is usually to skin as "Satellite "Lisions
- 8. Does not develop Metastasis

### 3) Patients with Gorlin Syndrome are known to develop:

- 1. Basal Cell Carcinoma
- 2. Melanoma
- 3. Squanous Cell Carcinoma
- 4. Bowen's disease lesions
- 5. Dysplastic nervi

### 4) Squanous Cell Carcinoma of the skin:

- Is Radio Sensitive
- Is best treated by Chemotherapy
- Surgery is done with 5cm skin margin
- Usually seen in children
- Its Metastasis is usually systemic before lymph node metastasis

### 5) Melanoma:

- Nodular melanoma has a better prognosis than all other types
- Acrol Melanoma is known to have the best prognosis
- Is Radio sensitive
- Usually develops metastasis to lymph nodes before systemic metastasis

Is more common is black populations

### 6) A melanoma with Clark level II:

- Reaches the epidermis
- Reaches the Basal layer
- Reaches the Reticular Dermis
- Reaches Junction of Reticular and papillary dermis
- Reaches the papillary Dermis

### 7) Majolin's ulcer:

- Is a type of basal cell carcinoma
- Is a type of squamous cell carcinoma
- Is a type of Melonama
- Is a type of ulcer is a blue nervus
- Is a type of an ulcer in a dysplastic nervus

#### 8) Strawberry hemangioma in a newborn in the cheek:

Best treated by surgical excision Best treated by steroid injection Best managed by observation for 4-5 years None of the above All of the above



#### Answers:

1st Questions: B

2nd Questions: E

3rd Questions: A

- 4th Questions: A
- 5th Questions: D
- 6th Questions: E
- 7th Questions: B
- 8th Questions: C