MD QUESTIONS

SKIN

(1) Difference between Acantholysis and Epidermolysis

Acantholysis :

Disruption of desmosomes joining keratinocytes of epidermis resulting in loss of cohesion of cell.

Epidermolysis :

Alteration of granular layer characterised by perinuclear clear spaces

(2) Acanthosis :

Increase in thickness of stratum basale and stratum spinosum (Malpighian layer).

(3) Dyskeratosis :

Abnormal premature keratinization of keratinocytes.

(4) Hyperkeratosis :

Increase in thickness of stratum corneum

Difference between Orthokeratosis and Parakeratosis

Orthokeratosis – No nuclei seen in stratum corneum.
Parakeratosis – Nuclei seen in stratum corneum.

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(5) Difference between Exocytosis and Epidermotropism:

Exocytosis : inflammatory cells within epidermis in conjuction with spongiosis(absence of Atypical nuclei)

Epidermotropism : Presence of atypical lymphocytes within Epidermis(in T cell lymphoma)

(6) Dermatophytosis:

True dermatophyte: Slender, Septate or non septate Hyphae.

Yeast : Short thick hyphae – Pityrosporium
Pseudohyphae , budding – Candida

To differentiate, fungal culture to be done.

(7) Comb like appearance of epidermis seen in:
Psoriasis vulgaris

(8) Saw tooth appearance of basement zone seen in :
Lichen planus

- Colloid bodies present in:
  Lichen planus

Lupus erthematous

(9) Claw like configuration of epidermis seen in:
Lichen niditus

(10) Glazed epidermis:
Lupus erythematosis
(a) Discoid
(b) Systemic

(11) Difference between Systemic lupus erythematosis(SLE) and Discoid lupus erythematosis (DLE)

SLE : lupus band test positive
IgG , IgM, C_3 positive
DLE : Lupus band test absent.

(12) Stevens Johnson syndrome:
Intermediate form of toxic epidermal necrolysis with mucosal eruption and ulcer.

(13) Burrows:
Seen in scabies
Cleft in stratum corneum or upper stratum malphigi

(14) Subcorneal bullae with acantholysis:
Bullous Impetigo- Staphylococcus pustules.

(15) Intraepidermal without acantholysis :

(a) Spongiotic vesicles pustules

Dermatophytes

Trichophyton

(b) Erythema toxicum Neonatorum:

Eosinophils.

(16) Intraepidermal bullae with acantholysis:

(a) Pemphigus foliaceous:

- Bullae replaced by crust and erosion
- It is superficial and seen on trunk

Pemphigus Erythematous:

- It is seen on face
- Within granular layer of epidermis few inflammatory cells are seen

(b) Pemphigus vulgaris:

- It is suprabasal
- Eosinophilic acantholysis in follicular infundibula.
- It is seen on scalp, trunk, oral mucosa.

Pemphigus vegetans:

- It is suprsbasal
- Intraepidermal eosinophilia
- It is seen on groin

- blister, verrucous plaque

Paraneoplastic pemphigus:

- It is suprsbasal
- Patient with usual neoplasm

(c) Benign familial pemphigus :

- Suparabasal acantholysis at level of epidermis

(17) Herpes virus:

- Nuclear inclusion around intraepidermal part of hair follicles
- To demonstrate Tzanck prepration is used.

(18) Subepidermal bullae with inflammation:

(a) Bullous pemphigoid :

- Seen on flexor surface of trunk

Cicatracial pemphigoid:

- Seen on mucous membrane of eye, mouth, genitalia
- Inflammatory cells are seen

Herpes gestational:

- Seen during pregnancy, post partum period and women using oral contraceptive pills.

(b) Dermatitis herpetiformis:

- Neutrophills are seen in papillary dermis
- Seen on scalp, extensor surface of extremities and buttocks
- Vesicles are pin head sized

(19) Subepidermal bullae without inflammation:

(a) Epidermolysis bullosa:

- Inherited disease
- Seen at site of trauma
- Minimum inflammation is seen

(b) Porphyria cutanea:

- Pigmentation, blister ,erosion and scars are seen
- Dermal papiilae protruding in to bullae
- It is PAS positive and Diastase resistance

(20) Normal epidermis and dermis:

(a) Vitiligo:

- Demarcated depigmentation patches
- Seen over head, neck, hands and genitals
- Melanocytes are reduced
- S-100 and peroxidase

(21) Lymphocytic vasculitis:

Small bood vessels destroyed by lymphocytes
Example: PLEVA and erythema multiformis

(22) Granulomatous vasculitis :

(a) Wegener's granulomatous vasculitis

- Giant cell necrosis

(b) Lymphomatoid granulomatous vasculitis

- Atypical lymphocytes are seen

(c) Allergic granulomatous vasculitis

- Eosinophils are seen
- Multiorgan involment like lung, kidney, heart
- Ulcerated nodules, plaques are seen
- Affect large arteries and venules of deep dermis and subcutis

(23) Lipidoses

Foamy histiocytic infiltration within dermis due to hyperlipidemia

(a) Xanthoma

infiltration in whole thichness

(b) Xanthelama

Seen in eyelids

Infiltration in upper dermis

(24) Granulomatous dermatitis

(a) Sarcoidosis

(b) Infectious

Tb, Leprosy, leishmaniasis

(c) Due to foreign material

Beryllium , silica, tattoo, silicone

(d) Necrobiotic granulomatous dermatitis

Extremities are are affected

Seen in diabetic patients

(i) Granuloma annulare:

Collagen in dermis

Homogenous pattern is seen

Affected area shows giant cells

(ii) Necrobiosis Lipoidica:
Seen in diabeties
Lower dermis is more affected

(iii) Rheumatoid nodule
Seen in joints like elbow
Sero positive patients
Larger in deep dermis

(25) Difference between

(a) Scar
- Physiological response of dermis to injury
- Collagen fibers are arranged horizontally parallel to epidermis .
- blood vessels, granulation tissue is present.

(b) Hypertrophic scar
- Excessive amont of scar
- Quantity of collagen more

(c) Keloid
- Larger accumulation of collagen generally seen on earlobes, chest
- Giant collagen fibers

(26) Differences between

(a) Scleroderma

- Systemic disease affecting ulcerated organs and skin
- Collagen fibers are increased
- Lymphocytes are at junction of normal and abnormal collagen

(b) Morphea

- Well defined navy white plaque
- Adipocytes absent around eccrine coils on back in morphea

(27) Lichen sclerosis

- Atrophy of trunk and genitalia
- In Epidermis, loss of rete ridge
- Subepidermal cleft
- Lymphocytic band

(28) Calcium deposits

(a) Calcinosis cutis

(b) calciphylaxis

(29) Panniculitis

- Inflammation of subcutis

(a) Septal panniculitis

- Seen in shins

(b) α_1- Antitrypsin deficiency panniculitis

- Extenser surface of arms, legs, thighs

(c) Lobular panniculitis

- Nodular vasculitis associated with tubercular granulomatosis

(d) Lupus panniculitis

- Seen in DLE

MD QUESTIONS

NON MELANOCYTIC CUTANEOUS TUMORS

Epidermal

(1) Verrucous hyperplasia

- Seen since birth or early childhood- epidermal nevus
  (hamartomatous verrucous epidermal growth)

- Verrucous hyperplasia with malformed adnexal structure – organoid nevus
  (nevus sebaceous of jadassehn)
  Basal cell Ca or adnexal neoplasm develop in this form

- Verruca vulgaris – church spire papillomatosis

- Verruca planna – plate like

- Verruca plantaris - invaginated

- Condyloma accuminatus – perineal region

- Molluscum contagiosum – molluscus bodies

- Seborrheic keratosis –variants
  - Acantotic epidermal growth with cornified cyst
  - Clonal seborrheic keratosis occurs in legs of elderly patients

- Clear cell acanthoma
  - Occurs in legs as plaque
  - Presence of glycogen rich clear keratinocytes

EPIDERMOID CARCINOMA OF ORAL CAVITY

- Present in main three location:
  (1)Floor of mouth
  (2)Soft palate
  (3)Ventrolateral aspect of mobile portion of tongue
- Presence of eosinophils- good prognosis
- Verrucous Ca
  - Variant of well differentiated epidermiod Ca of buccal mucosa, lower gingiva
  - Swollen voluminous rete pegs
  - D/D from epidermoid is good cytologic differentiation
  - Lack of anaplasia
  - Club like morphology
  - No invasion

-

TUMOURS AND TUMOR-LIKE CONDITION

1. Seborrheic Keratosis
    - Trunk of adults
    - Seborrheic keratosis with internal malignant disease known as Lesser Trélat sign

2. Fibroepithelial polyp known as ACHROCHORDON
    - Results from seborrheic keratosis, warts
    - Fibrokeratoma occurring around interphalangeal joints

3. Actinic keratosis
    - Places exposed to sunlight

4. Bowen's disease
    - Skin unexposed to sunlight
    - Regarded as carcinoma-in -situ

5. Epidermoid carcinoma
    - Exposure to sunlight
    - Lack of pigment
    - Complication of xeroderma pigmentosum
    - Genetically determined condition
    - Characterized by diminished capacity of DNA repair
    - Also develop basal cell carcinoma and malignant melanomas

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- Epidermoid carcinoma also associated with
  - Cutaneous scars
  - Renal transplantation
  - Icthyosis, epidermal nevus

Variants

- Spindle cell : Differential diagnosis of malignant melanoma, atypical fibroxanthoma
- Adenoid : Differential diagnosis of metastatic adenocarcinoma, Adenosquamous carcinoma of skin
- Verrucous carcinoma : Well differentiated type of epithelial carcinoma. Sole and foot, oral cavity, mucous membrane.

PSEUDOEPITHELIOMATOUS HYPERPLASIA

- Sites of trauma, chronic irritation ulcers
- Difference from epidermoid carcinoma by atypical cells and inflammatory reaction

BASAL CELL CARCINOMA

- Sun exposed
- Children, young and adults
- Nevus of Jadassohn

- Types :
    - Superficial
    - Basosquamous
    - Granular
    - Clear cell
    - Fibroepithelial

➢ (?) Basal cell nevus syndrome consists of
    - Multiple basal cell carcinoma
    - Palmar pits
    - Calcification of dura
    - Keratinous cysts of jaws
    - Skeletal abnormalities
    - CNS abnormalities
    - Mesentry, endocrine organs

ADNEXAL TUMORS

ECCRINE SWEAT GLAND TUMORS

- Three parts : intraepidermal part of duct, dermal part of duct and secretory coil

1. Poroma
   - Palms and soles
   - Intraepidermal or dermal or both

2. Acrospiroma (clear cell hidradenoma)
   - Solid hidradenomal
   - Distal duct
   - Clear cytoplasm (clear cell hidradenoma)

3. Syringoma
   - Neck, face (lower eyelids in women), vulva, acral
   - Eruptive, appear in crops in young patients in anterior half of body
   - Clusters of small ducts with comma shaped extensions

4. Chondroid syringoma (mixed tumor)
    - Face, head, neck extremities, trunk
    - Comparable to mixed tumors of salivary glands
    - Cells with hyaline cytoplasm

5. Eccrine cylindroma **(TURBAN TUMOR)**
    - Scalp (**TURBAN TUMOR**), head and neck
    - Seen in association with microscopically identical tumors in major salivary glands
    - Heavy accumulation of basement membrane material around and within tumor lobules

6. Eccrine spiradenoma
    - Painful
    - Anywhere in body
    - Cellular
    - Scanty cytoplasm, prominent nuclei
    - **D/D** synovial sarcoma and metastatic carcinoma
    - High degree of vascularity

PAPILLARY SYRINGADENOMA

- Scalp, neck and face
- Childhood to senescence : change in birthmark
- Glandular proliferation with plasma cell infiltration
- Nevus sebaceous in one-third and basal cell carcinoma in one-tenth of patients

CLEAR CELL ACANTHOMA

- Leg of females
- Intraepidermal duct

SWEAT GLAND CARCINOMA

- Adenocarcinoma of eccrine glands
- Adults
- Simulate metastatic carcinoma of breast or kidney or basal cell carcinoma

MALIGNANT POROMA

- Lower extremities
- Variants :
    - Mucinous : scalp of elderly
    - Sclerosing sweat duct carcinoma : upper lip

- Lymphoepithelial tumor of skin

EXTRAMAMMARY PAGET'S DISEASE

- Sites: Labia majora
  Scrotum
  Perineum
- Contrast to Paget's disease of breast, these are positive for mucin
- **D/D** : Bowen's disease
  Junctional nevi
  Malignant melanoma

SEBACEOUS GLAND TUMORS

- Senile sebaceous hyperplasia
- Nose and cheeks of elderly person

➢ NEVUS OF JADASSOHN

- Hamartomatous of large sebaceous gland with heterotropic apocrine glands
- Defective hair follicles
- Scalp and face
- Infancy – enlarge

➢ EPIDERMAL NEVI

- Epidermal nevi is without adnexal component

➢ SEBACEOUS ADENOMA

- On face of patients with tuberous sclerosis syndrome – fibrovascular hamartoma

➢ SEBACEOUS CARCINOMA

- Eyelids in orbit
- Component of **MUIR TORRE'S SYNDROME**
- Multiple cutaneous tumors with varying degrees of sebaceous and hair follicle differentiation with internal malignancy

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APOCRINE SWEAT GLAND TUMORS

- Axilla, groin, perineum
- Immunohistochemistry : GCDFP – 15
- Cystadenoma
- Tubular apocrine adenoma
- Papillary hydradenoma
- Ceruminous adenoma

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HAIR FOLLICLE

➢ INVERTED FOLLICULAR KERATOSIS

- Face- elderly patients,eyelids
- Presence of squamous eddies
- Inflammation lacking

➢ TRICHOEPITHELIOMA

- **D/D :** Basal cell carcinoma
- Helpful features :
    - Frond like arrangements of basaloid cells
    - Presence of epithelial tracts comprised of two or more layers of basaloid cells
    - Formation of papillary mesenchymal bodies

➢ TRICHILEMMOMA

- Cowden's disease or multiple hamartoma syndrome (multiple trichilemmoma)
- Clear cells

➢ KERATOACANTHOMA

- Dome shaped lesion with central crater of keratin
- Young age
- **D/D :** Squamous cell carcinoma
- Eosinophilic infiltration in epidermoid carcinoma and not in Keratoacanthoma

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- **IHC :** Filagrin positive (Histidine rich protein)

➢ KERATINOUS CYST

- 1. Epidermal or epidermoid : lamellated keratin
  no calcification
- 2. Trichilemmal type : scalp
  unlamellated keratin
  focal calcification
- Others :
  - Dermoid : presence of hair follicle
  - Steatocystoma : sebaceous glands and hair follicles

➢ PILOMATRIXOMA

- Calcified epithelioma
- Subepidermal
- Children and young adults – head, neck and upper extremities
- Nests of basaloid cells
- **D/D:** Basal cell carcinoma
- Basaloid cells undergo keratinisation leading to formation of ghost cells (necrotic cells not seen in BCS)
- Abnormal calcification and ossification is present here.

MELANOCYTES

- Neuroectodermal origin
- Basal layer of skin and skin adnexa produce insoluble pigment called melanin
- Positive of silver stain for S-100 protein, Vimentin
- Immature counterpart of melanocyte is melanoblast

➢ NEVI

- Congenital mole
- Average number of nevi a person has is 20-30

➢ JUNCTIONAL NEVUS

- Restricted to basal portion of epidermis
- Malignancy can occur

➢ INTRADERMAL NEVUS

- In dermis
- Adult
- Bone, abscess, psammoma bodies, amyloid
- No malignancy can arise

➢ COMPOUND NEVUS

- Mixture of both above types

- Clusters of benign nevus cells seen in lymphnode, commonly in axillary lymph node

➢ BLUE AND CELLULAR NEVI

- Small in size
- Head, neck and upper extremities
- Misdiagnosed as Benign Fibrous Histiocytoma as pigment is misinterpreted as hemosiderin
- Cellular nevus – suspected malignant because of intense pigmentation on buttock and sacrococcygeal

- **D/D FOR MALIGNANT MELANOMA**
    - Absence of junction activity
    - Epidermal invasion
    - Peripheral inflammation
    - Necrosis
    - Presence of pushing margins
    - Biphasic patterns
    - Relative lack of atypia and mitotic figures

➢ SPITZ NEVUS

- Occurs before puberty or in adult life
- Face
- Spindle epitheloid cells present
- Cigar cells
- Pigmented variant found
- In adults, desmoplasia around cells seen
- Symmetrical shape

- Sharp demarcation
- Maturation
- Presence of tadpole and giant cells
- Telengectasia
- Edema
- Fibrosis
- Hyaline bodies
- **D/D OF MALIGNANCY :**
    - Invasion in lymphatic vessels
    - Pseudoepithelimatous hyperplasia

➢ HALO NEVUS

- Depigmentation on trunk
- Lymphocytes and histiocytes are present
- **D/D :** Melanoma, lymphoma, dermatitis

➢ ACTIVE NEVUS

- Benign nevi with prominence of junctional component and hyperplasia of individual basal melanocytes with increased cellularity and dermal inflammatory infiltrate
- Due to sunlight exposure and in pregnancy

➢ DYSPLASTIC NEVUS

- Same as active nevus
- Genetically determined
- Prone to develop malignant melanoma

➢ MALIGNANT MELANOMA

- Sunlight exposure
- Head, neck, lower extremities – females
- In whites – after puberty

CUTANEOUS MELANOMA

- Subungual (melanocytic whitlow)
- Palms and soles
- More seen in patients with dysplastic nevi
- Four categories :
    1. Hutchinson's freckles
    2. Superficial spreading melanoma
    3. Nodular melanoma
    4. Acral lentiginous melanoma

- **D/D OF MALIGNANT MELANOMA :**
    1. Benign fibrous histiocytoma
    2. Thrombosed hemangioma
    3. Pigmented seborrheic keratosis
    4. Pigmented basal cell carcinoma

AMELANOCYTIC MELANOMA

- **D/D :** Pyogenic granuloma callus
- Non exhibit junctional activity during initial phase
- Important marker :
    - S-100 – positive in melanoma
      negative in most tumors with D/D
    - Vimentin positive
- Benign lesions overdiagnosed as melanoma is Spitz nevus, Halo nevus, Activated nevi
- Malignant melanoma underdiagnosed as benign is level I and II

- Combination of features to diagnose malignant melanoma :
    1. Discohesive cells
    2. Extension of individual melanocytes within adnexal epithelium (Pagetoid melanoma)
    3. Size and shape variation
    4. Lack of maturation
    5. Atypia
    6. Mitosis
    7. Necrosis of individual melanocytes should be differentiated from eosinophilic hyaline bodies seen in Spitz nevi
    8. Dermal infiltrate of lymphocyte

- Regression in melanocyte is common in :
    - Hutchinson's freckle type
- Dense infiltrate of lymphocytes indicate :
    - Spontaneous regression

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- How to differentiate secondary malignant melanoma in skin from primary?
    - In secondary malignant melanoma, dermal component is wider than epidermal component while in primary malignant melanoma, epidermal is more than dermal

(Prognostic criterias of malignant melanoma are important for exam purpose)

- Other pigmentations seen in skin tumors:
    - Melanoacanthoma
    - Seborrheic keratosis
    - Actinic keratosis
    - Bowen's disease
    - Basal cell carcinoma
    - Trichoepithelium
    - Pilomatrixoma

NEUROENDOCRINE CELLS

MERKEL CELL TUMORS

- Cutaneous malignancy : Small cell carcinoma
  Neuroendocrine carcinoma
- Face and extremities
- Adults and elderly
- **D/D :** Malignant lymphoma
- Seen in association with invasive epidermoid carcinoma and with basal cell carcinoma
- Thus, origination is multipotential
- Positive for keratin, neurofilament, neuro specific enolase
- Metastasis in lungs, liver, bones
- Others :
  - Small cell carcinoma
  - Peripheral neuroblastoma
  - Carcinoid tumor

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DERMIS

- How to differentiate between keloid and hyperplastic scar?
    - Formation of wide acidophilic band of collagen with fibroblasts and myofibroblasts running parallel between them in keloid

BENIGN FIBROUS HISTIOCYTOMA

- On extremities
- Less than 1 cm
- If pigmented – confused with nevi and malignant melanoma
- White to yellow in color
- **IHC :** Vimentin positive
  Negative for lysozyme
- Touton's giant cells
- Monster cells seen

ATYPICAL FIBROXANTHOMA

- Regarded as carcinoma
- Tumor cells within fibrocytic stroma
- Inflammatory background and scattered tumor cells
- Vimentin, α-1 antitrypsin
- Sarcoma like tumors of skin

DERMATOFIBROSARCOMA PROTUBERANS

- Dermis invading subcutaneous tissue
- Large in size
- Radial whorls present

MFH

- **D/D :** Atypical fibroxanthoma
  Dermatofibrosarcoma protuberans

LEIOMYOMA OF SKIN

- Genital lesion in nipple or scrotum
- Lesions in muscles and vessels
- Painful lesions

SKIN LYMPHOMA

- Mycosis fungoides - T-cell maturation
- Head and neck - B-cell maturation

ENDOMETRIOSIS OF SKIN

- Umbilicus
- Groin
- Near surgical scar

MENINGIOMA OF SKIN

- In skin or along vertebral axis
- Nasal glioma

METASTATIC CA OF SKIN

- Males : lungs, large bowel, melanoma, kidney, epidermoid or oral
- Females : breast, malignant melanoma, lung, ovary, kidney
- Renal cell carcinoma : Solitary nodule
    - **D/D :** As sweat gland carcinoma
- Skin metastasis on scalp and with alopecia – occur on chest and abdomen, head and neck

ORAL CAVITY AND OROPHARYNX

- Association of syphilis with tongue carcinoma found
- Melkersson Rosenthal syndrome – granulomatous lesion in stroma of lip
- Triad of :
    - Orofascial swelling
    - Peripheral facial nerve paralysis
    - Plicated tongue
- Wegener's granulomatosis (lethal midline granuloma)
- Ulcerative eosinophilia (Riga Fede Disease)
- Crush injury (Traumatic granuloma)
- Importance of presence of eosinophils in epidermoid carcinoma – good prognosis
- High risk areas of oral cavity for epidermoid Ca :
    - Floor of mouth
    - Soft palate
    - Ventrolateral aspect of mobile portion of tongue
- Epidermoid carcinoma have adenoid or pseudoglandular appearance because of acantholysis
- Verrucous carcinoma is a variant of well differentiated epidermoid carcinoma
- Precursors of verrucous carcinoma :
    - Verrucous hyperplasia
    - Verrucous leukoplakia
    - Verrucous keratosis
- Oral cavity is a common metastatic site for lung, renal (as pyogenic granuloma)

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MANDIBLE AND MAXILLA

- Albright's syndrome :
    - Polyostotic fibrous dyplasia pigmented skin lesions
    - Endocrine dysfunction with precocious puberty in females
- Ossifying fibroma
    - Deposition of lamellar bone with prominent osteoblastic rimming in fibrous dysplasia

RESPIRATORY TRACTS

NASAL CAVITY

- Mucormycosis : other sites: nose, orbit, brain
- Other paranasal mycotic infections : Aspergillus, C. lunata

- **Wegener's granulomatosis** : nasal involvement + pulmonary and renal disease
- **D/D**: TB, midline granuloma

- **Rhinoscleroma :** caused by Klebsiella group
- Plasma cells + foamy macrophages
- PAS positive

- **Myospheralosis :** lipogranuloma following packing with petroleum based ointments
- Presence of large tissue space containing sac like structures with brown spherules resembling fungi

- **Nasal Papillomas :**
    - Nasal septum – exophytic mushroom shaped
    - Lateral wall – inverted type misdiagnosed as carcinoma

- Sinonasal carcinoma in nickel refiners

- **Nasopharyngeal carcinoma**
- Two peaks : 15-25 years and 60-69 years
- Chinese males
- Epstein Barr virus

- Epidermoid : in older age and no association with EBV

- Undifferentiated (spindle shaped contains inflammation – lymphoepithelioma)
- Two patterns :
    - Regaud's pattern – well-defined aggregates of epithelium surrounded by fibrous tissue and lymphoid cells
    - Schmicke's pattern – epithelial diffuse intermingles with inflammatory cell.
      D/D : Lymphoma

- Metastatic to cervical lymphnode- most common presentation
- Most common salivary gland tumor occurring in nasal cavity : Adenoid cystic

- **Lethal midline granuloma** :
- Destructive lesion of URT
- Seen in 3 conditions :
    - Wegener's granulomatosis
    - Lymphoma
    - Polymorphic reticulosis
- Erythrophagocytic polymorphism is seen

- **Angiofibroma**
- Androgen dependant
- In young males
- Common malignancies in nasal cavities in children :
    - Embryonal rhabdomyosarcoma
    - Lymphoepithelioma
    - Malignant lymphoma

LARYNX AND TRACHEA

- Fungus affecting larynx :
    - Histoplasma
    - Blastomycosis
    - Aspergillus
- Granuloma involving only anterior portion of larynx or associated with oral lesion – Histoplasma (not in TB)

- Juvenile laryngeal papilloma :
    - Multiple viral etiology – HPV 11 and HPV 6

LUNGS

1. What are blue bodies?

- They are seen sometimes in alveoli formed of calcium carbonate, e.g. interstitial pneumonia

2. Congenital diseases occurring in lungs :

- Cystic disease
- Lobar emphysema
- Diaphragmatic hernias

3. Disorders associated with chronic sinonasal infection with bronchiectasis

- Cystic fibrosis (mucoviscidosis mucin)
- Kartagener's syndrome (immobile cilia)
- Young's syndrome (situs invertus + infertility)

4. Why bronchiectasis occur in left lung?

- Because of difficulty in drainage caused by physiologic constriction imposed by left bronchus on pulmonary artery

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5. Types of bronchiectasis :

- Saccular
- Cystic
- Cylindric

6. Region of involvement in bronchiectasis :

- Secondary bronchi
    - Honeycomb appearance of lung is seen in :
        - Interstitial pneumonia
        - Pneumocystitis carinii
        - Asbestosis
        - Histiocytosis X preceding lung Ca (Adenocarcinoma)
    - Honeycomb means – area of coarsening lung with increasing porosity

7. What are tumourlets?

- Multiple small solid foci of proliferating spindle cells seen in saccular bronchiectasis representing nodular hyperplasia of Kultschitsky's type of neuroendocrine cells related to carcinoid tumor.

8. What are chronic lung abscesses associated with?

- Fungal infections like Mucor, Aspergillus

9. What are tuberculomas?

- Expression of tuberculosis infection

10. What is Wegener's granulomatosis?

- Classic type : Triad of –
  - Necrotizing angitis
  - Aseptic necrosis (URT lung)
  - Focal glomerulitis
- Limited type :
  - Confined to lungs only with angitis and no glomerulitis

11. What is interstitial pneumonia?

- Inflammatory infiltrate is predominantly inter-alveolar
- Associated with chemotherapy, drugs, neurofibromatosis, immune mediated diseases

12. Types of interstitial pneumonia :

- A) Desquamative
- B) Lymphocytic – **D/D :** follicular bronchitis, lymphocytic lymphoma
- C) Giant cell
- D) Classic – typical

13. Lipoid pneumonia

- Autopsy finding
  - Exogenous – nasal spray
  - Endogenous

14. Pulmonary diseases showing eosinophilia with or without peripheral eosiniphils

- A) Loeffler's syndrome
- B) Helminths
- C) Drugs
- D) Filaria, Dirofilaria, Aspergillus
- E) Asthma – allergic

If eosinophilia with necrotizing vasculitis -

- Histiocytosis – X
- Extrapulmonary cause

Note- Read granulomatous diseases of lungs

15. AIDS associated

- A) Pneumocystitis carinii
  - Stain – Gomoris Methenamine Silver (GMS)

- B) Cytomegalovirus pneumonia
  - Stained by PAS and GMS
  - Viral inclusion bodies seen

- C) Atypical mycobacteriosis, tuberculosis

- D) Candidiasis, toxoplasmosis, Cryptococcus, blastomycosis, histoplasmosis

- E) Kaposi's sarcoma

16. Goodpasture's syndrome :

- Glomerulonephritis
- Hemosiderosis

17. **D/D** of hemorrhagic lung diseases :

- Mitral stenosis
- Polyarteritis nodosa
- Lupus erythematous
- Systemic vasculitis

18. What is Caplan's syndrome?

- Rheumatoid arthritis + Pneumoconiosis

19. What is Pancoast 's syndrome?

- Carcinoma in superior pulmonary sulcus
- Clinical picture characterized by pain in distribution of ulnar nerve

20. What is coin lesion?

- Lung carcinoma presenting as solitary circumscribed mass on chest X-ray of asymptomatic individual