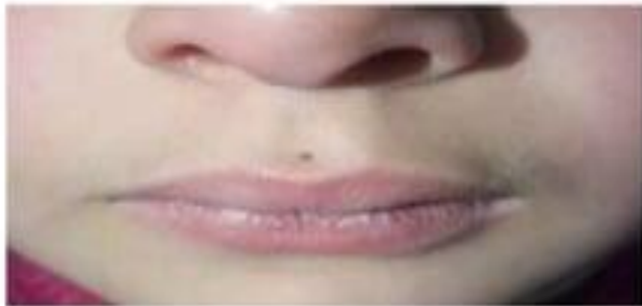
SINUS AND FISTULA

DEFINITION:

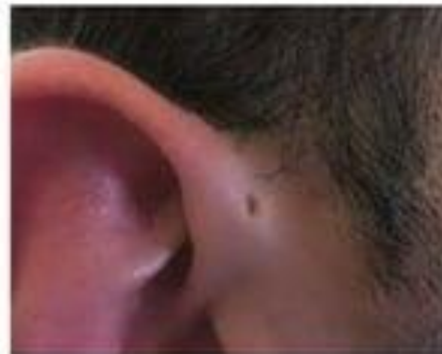
- It is a blind track leading from the surface down into the tissues .
- It is lined with granulation tissue.
- Following are a few examples:
- I. Congenital sinus: Preauricular sinus, post-amicular sinus
- 2. Acquired sinus:

- -Median mental sinus : Occurs as a result of tooth abscess.
- - Pilonidal sinus: Occurs in the mid line in the anal region
- - Osteomyelitis: Gives rise to sinus discharging pus with or without bony spicules.
- • Most common sinus in the neck is due to tubercular lymphadenitis. It discharges cheesy material. Skin surrounding the sinus shows bluish discolouration.

- MIDLINE UPPER LIP SINUS



- PREAURICULAR SINUS



FISTULA:

- It is an abnormal communication between the lumen of one viscus and the lumen of another (internal) or communicationof one hollow viscus with the exterior, i.e. body surface(external fistula)

- **Examples of internal fistula**
  - Tracheo-oesophageal fistula
  - Colovesical fistula
- **Examples of external fistula**
  - Orocutaneous fistula due to carcinoma of the oral cavity infiltrating the skin
  - Branchial fistula
  - Thyroglossal fistula

CAUSES OF PERSISTENCE OF A SINUS OR FISTULA:

- Presence of foreign body.
- Persistent infection.
- Distal obstruction as in enterocutaneous fistula.
- Absence of rest.
- Epithelial isation of the track.
- Malignancy.
- Nondependent drainage, inadequate drainage.
- Dense fibrosis..
- Irradiation.
- Specific causes-tuberculosis, actinomycosis.

PATHOPHYSIOLOGY:

- CONGENITAL:
- Arise from remnants of embryonic ducts that persist instead of being obliterated and disappearing completely during embryonic development.
- e.g., pre-auricular sinus, branchial fistula, TOF,congenital AVF.

- ACQUIRED :

Usually secondary to presence of foreign body, necrotic tissue in affected area (or) microbial infection (or) following inadequate drainage of abscess.

e.g., perianal abscess when bursts spontaneously into skin forming a sinus and when bursts into both skin and anal canal forming a fistula.

CLINICAL FEATURE:

- Usually asymptomatic but when infected manifest as-

  Recurrent/ persistent discharge.

  Pain.

  Constitutional symptoms if any deep seated origin.

CLINICCAL EXAMINAATION:

- INSPECTION:

  1. Location: usually gives diagnosis in most of the cases.
- SINUS: pre-auricular- root of helix of ear.

  median mental- symphysis menti.

  TB- neck.
- FISTULA: branchial- sternomastoid ant border.

  parotid- parotid region

  thyroglossal- midline of neck below hyoid.

- 2.Number: usually single but multiple seen in HIV patients (or) actinomycosis.
- 3. Opening:

  a) sprouting with granulation tissue-foreign body.

  b) flushing with skin- TB
- 4. Surrounding area:

  erythematous- inflammatory

  bluish- TB

  excoriated- faecal

  pigmented- chronic sinus/fistulae.

- 5. Discharge:
  - White thin caseous, cheesy like- TB sinus
  - Faecal- faecal fistula
  - Yellow sulphur granules- actinomycosis
  - Bony granules- osteomyelitis
  - Yellow purulent- staph. Infections
  - Thin mucous like- brachial fistula
  - Saliva- parotid fistula

- Palpation:

  a) Temperature and tenderness:

  b) Discharge: after application of pressure over the surrounding area.

  c) Induration: present in chronic fistulae/sinus as in actinomycosis.
  TB Sinus induration absent.

  d) Fixity:

  e) Palpation at deeper plane:
  lymph nodes- TB
  Thickening of bone underneath- OM

INVESTIGATIONS:

- CBP- Hb, TLC, DLC, ESR.

   □ Discharge for C/S , AFB, cytology, Gram staining.

   □ X-RAY of the part to rule out OM, foreign body.

   □ X-RAY KUB and USG abdomen in cases of lumbar fistula to rule out staghorn calculi.

   □ MRI □ BIOPSY from edge of sinus

   □ CT Sinusogram

   □ FISTULOGRAPHY/ SINUSOGRAPHY

TREATMENT:

- Antibiotics
- Adequate rest
- Adequate excision
- Adequate drainage.

HOMOEOPATHIC TREATMENT:

- Hepar sulph for intense pain.
- Calcarea sulph for thick yellow discharges.
- Calcarea phos for painless fistula.