




ULCER, SINUS & FISTULA

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ulcer

- It is discontinuity of an epithelial surface.
 - It is characterised by destruction of surface epithelium and a granulating base
 - Ulcer can be classified as
 - a) non specific
 - b) specific
 - c) malignant
- 





Non specific ulcer

- Traumatic ulcer
- Arterial ulcer
- Venous ulcer
- Neurogenic ulcer
- Infective ulcer
- Diabetic ulcer
- Tropical ulcer
- Cryopathic, Martorell's, bazin ulcer



Traumatic ulcer

- Mechanical – dental ulcer d/t jagged tooth
- Electrical burn
- Application of caustics

Arterial ulcer

- d/t peripheral vascular ds eg.
 - atherosclerosis, TAO, cervical rib, Raynaud's ds etc



Venous ulcer

- medial lower 1/3 rd of leg, ankle
- painless
- in varicose veins or post phlebitis limb

Trophic ulcer

- pressure sore or decubitus ulcer d/t prolonged pressure
- punched out ulcer with slough on floor
- IT, GT, sacrum, heel, occiput



➤ **Diabetic ulcer**

- d/t neuropathy and microangiopathy
- > blood glucose > chances of infection
- foot, leg, back, scrotum, perineum



Specific ulcer

- Tuberculosis
- Syphilis
- Actinomycosis
- Meleney's ulcer
- Soft sore



malignant ulcer

- Squamous cell carcinoma
- Basal cell carcinoma
- Malignant melanoma



examination of ulcer

- Inspection
- Palpation
- Regional lymph node
- Sensation (nerve lesion)
- Pulsation (vascular insufficiency)
- Function of joint
- Systemic examination



inspection

- Location
- Size, shape
- Edge
- Floor
- Discharge
- Surrounding area

Arterial ulcer	Tip of the toes, dorsum of the foot
Long saphenous varicosity with ulcer	Medial side of the leg.
Short saphenous varicosity with ulcer	Lateral side of the leg.
Perforating ulcers	Over the sole at pressure points.
Nonhealing ulcer	Over the shin

➤ Floor: is part of ulcer which is seen

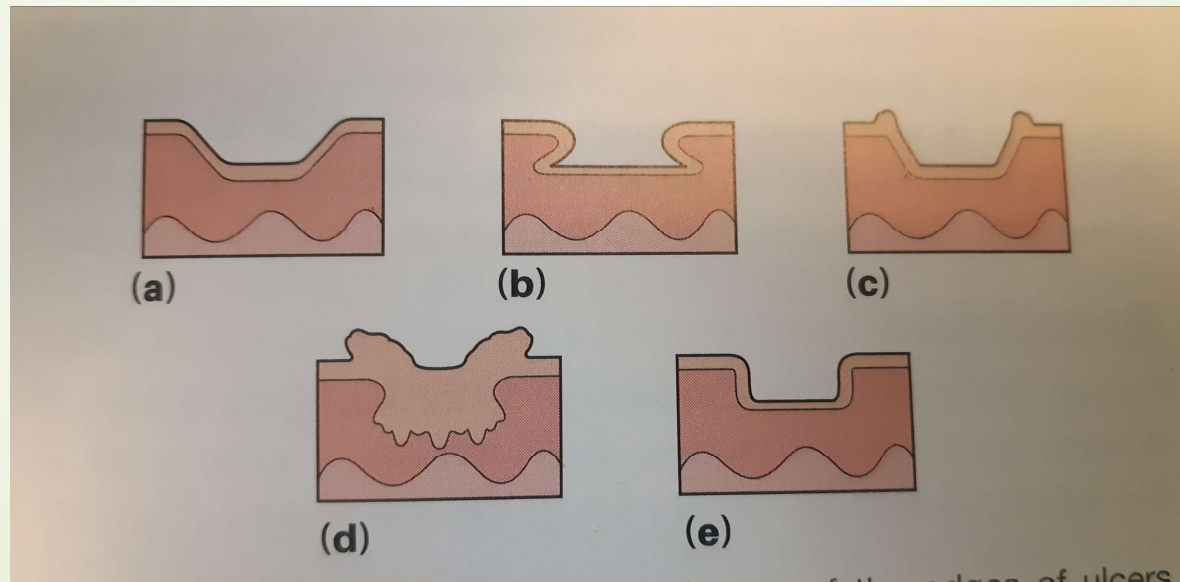
Red granulation tissue	Healing ulcer
Necrotic tissue, slough	Spreading ulcer
Pale, scanty granulation tissue	Tubercular ulcer
Wash leather slough	Gummatous ulcer




discharge of ulcer

Serous dischrge	Healing ulcer
Purulent discharge	Spreading ulcer
Bloody discharge	Malignant ulcer
Discharge with bony spicules	osteomyelitis
Greenish discharge	Pseudomonas infection

EDGES OF ULCER



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- a) **non specific ulcer**: shelving edge
 - b) **tubercular ulcer**: undermined edge
 - c) **basal cell carcinoma** (rodent ulcer): rolled edge, may exhibit small blood vessels
 - d) **epithelioma**: heaped-up, everted edge and irregular thickened base
 - e) **syphilis**: punched out and thin base, may be with 'wash-leather' slough



palpation

- Edge
- Base
- Mobility
- Bleeding
- Surrounding area



base

- Is the area on which ulcer rest
- Can only be palpated
- Edge, base n surrounding area is palpated for induration
- Max induration – squamous cell carcinoma
Min induration – malignant melanoma
brawny induration - abscess



mobility & bleeding

- Malignant ulcer are fixed though benign ulcer moves
- Malignant ulcer bleeds on touch
- Also granulation tissue on healing ulcer bleeds on touch



regional lymph nodes

- ▶ Tender n enlarged – acute infection
- ▶ Non tender n enlarged – chronic infection
- ▶ Non tender n hard – squamous cell carcinoma
- ▶ Non tender, firm, enlarged n multiple – malignant melanoma



mangement

➤ Investigation

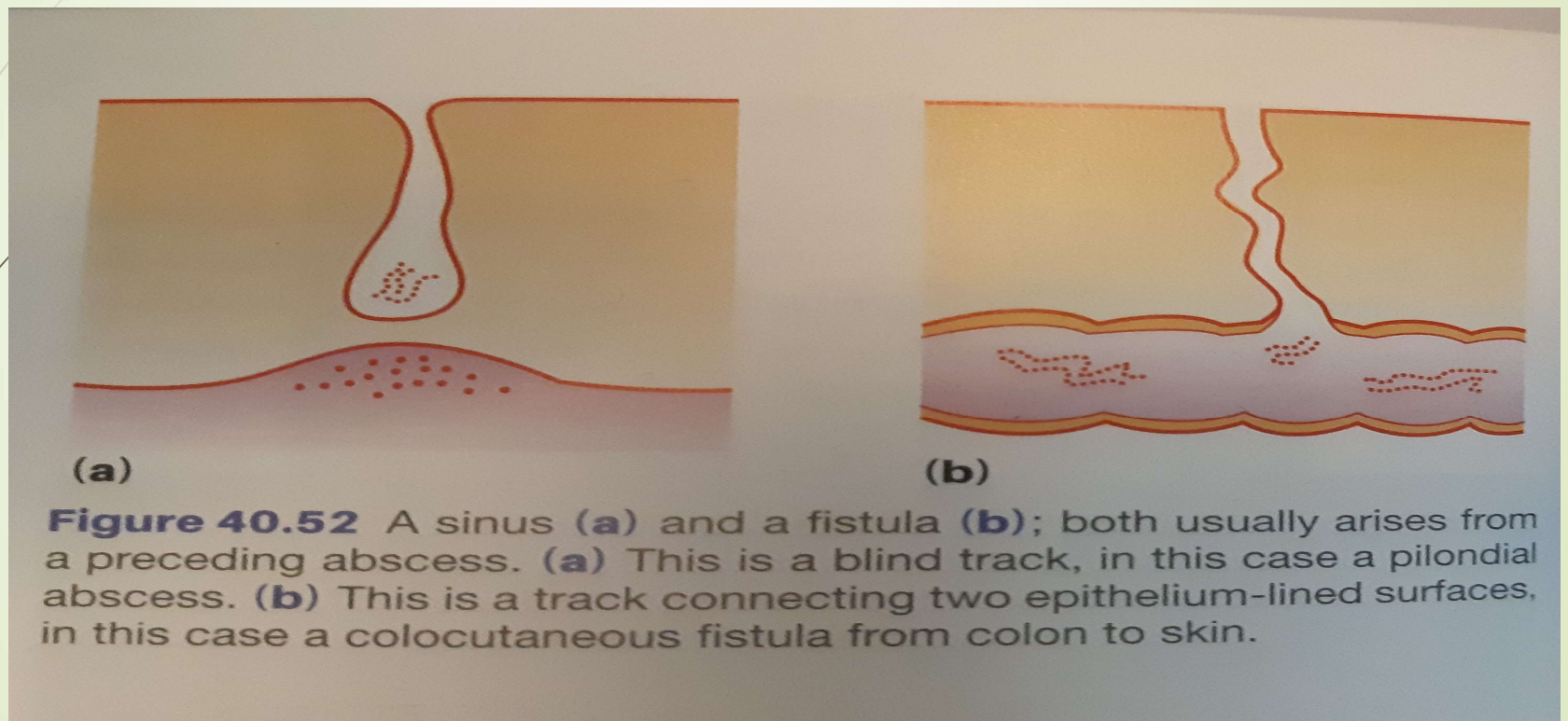
1. CBC, RBS, LFT, KFT (routine)
2. R/M urine
3. Pus culture n sensitivity
4. Angiography
5. Chest X Ray, X Ray of relevant body part
6. Biopsy



Treatment

- look for cause
 - treat deficiency n pain
 - control infection (proper antibiotics)
- debridement n dressing
- hydrogen peroxide,
 - EUSOL (Edinburgh university solution)
- Closure of defect
 - epithelisation (defect is small)
 - skin grafting (defect is large)

SINUS & FISTULA





SINUS

- ▶ blind ending tract connecting cavity lined with granulation tissue (often abscess cavity) to epithelial surface
- ▶ Congenital: from remnants of persistent embryonic ducts
- ▶ Acquired: retained FB (hair/ suture)
 - chronic infection (TB, OM, AM, Crohn's)
 - malignancy
 - inadequate surgical drainage





treatment

- Remove underlying cause
- Biopsies
- Excision n lay open/ grafting



FISTULA

- Abnormal communication/tract between epithelial lined surfaces (viscus/skin/vessels)
- lined by granulation tissue may be epithelised in chronic cases
- Congenital: branchial fistula
 - tracheoesophageal fistula
 - thyroglossal fistula
 - congenital AV fistula



➤ Acquired

- enterocutaneous fistula
- vesicovaginal fistula
- rectovesical fistula
- cholecystoduodenal fistula



Investigation

- same as of ulcer except
- fistulogram
- MR fistulogram

Treatment

- excision n HPE
- Treatment of specific cause

Discussion

Thank you for your attention!

