THE DIAGNOSTIC PATHWAY OF ULCER DIAGNOSIS

A "hole in the skin" secondary to destruction of the epidermis and at least the upper papillary dermis.

DIFFERENTIAL DIAGNOSIS (NOT VEINS)

- Neoplasm (SCC, BCC, MM, KS, lymphoma)
- Occlusive (arterial, embolic, Buerger's)
- Trauma (DA, decubitus, physical)
- Vascular (vasculitis, haematological)
- Endocrine (DM, myxoedema, nutritional)
- Infection (deep fungal, mycobacterium)
- Neuropathic (DM, syphilus, leprosy, spinal)
- Skin (pyoderma gangrenosum, NLD)

LEG ULCERS: TOP SIX

- Venous
- Arterial
- Squamous cell carcinoma
- Infection
- Diabetic neuropathy
- Vasculitis (leucocytoclastic, pyoderma gangrenosum, PAN, livedoid, ec)

ULCER DIAGNOSIS

- HISTORY
 - Patient profile
 - Pre-existing conditions
 - Rapidity of onset
 - Symptoms (pain)
 - Systemic features
 - Immunosuppression
 - Medications
 - Previous treatment
 - Social

- EXAMINATION
 - Site
 - Size
 - Shape Border
 - Base
 - Peripheral pulses
 - Surrounding skin
 - General

VENOUS ULCER

- Gaiter region (medial lower third of leg)
- Uneven edges, shallow and exudating, granulation tissue
- Surrounding reddish-brown pigmentation and oedema
- Varicose eczema, LDS, atrophie blanche, healed ulcers
- Absent to mild pain, relieved by elevation
- Normal pulses, no neuropathy

ARTERIAL ULCER

- Lateral ankle or foot
- Well demarcated edges, deep, necrotic base, poor quality or no granulation tissue
- Atrophic skin, dystrophic nails, absence of hair growth, limb may be cool
- Very painful at rest (relieved by lowering leg to a dependant position, dependent rubor)
- Diminished or absent pulses
- Possible neuropathy

SQUAMOUS CELL CARCINOMA

- Any site (often below knee)
- Heaped (crater) firm edges, necrotic centre or crusted and easily traumatised
- Surrounding skin often sun damaged (solar keratosis, Bowen's, BCC etc)
- Not painful unless very large
- Normal pulses, no neuropathy

"INFECTIVE" LEG ULCER

- Bacterial, deep fungal, mycobacterium
- Immunosuppressed, penetrating injury
- Arms or legs
- Absent to moderate pain
- Purulent, erythematous margins, raised edges
- Maybe multinodular/ulcerative
- Lymphatic distribution

DIABETIC ULCER

- "Neurotropic ulcers"
- Over metatarsal arch, heel, toes
- Often deep and infected; surrounded by thick callus
- Painless
- Diminished pulses, neuropathy

PYODERMA GANGRENOSUM

- A/w with inflammatory bowel disease, haematological, connective tissue, arthritis
- Calves and thighs
- Irregular raised border (dusky red-purplish), necrotic base may extend to fascia
- Very painful
- Often severe (rapidly growing)

INVESTIGATION OF LEG ULCERS

- Biopsy (ulcer edge, histology and microbiology)
- Duplex US, ABI
- FBC, ESR, EPG/IEPG, BSL, etc
- Wound swab
- Refer appropriately





















