Surgery – General Surgery

History and Examination of "Ulcer"

A. Overview:

An ulcer is a solution (break) of the continuity of an epithelium (i.e. an epithelial deficit, not a wound). Unless it is painless and in an inaccessible part of the body, patients notice ulcers from the moment they begin, and will know a great deal about their clinical features. Browse's

B. Differential diagnosis:

DDX	What support this diagnosis?
Venous ulcers	
Venous ulcers are found in the lower medial third of the lower limb. Their site is a diagnostic feature.	Risk factors: 1- 50% associated with primary varicose veins. The remainder are the result of post thrombotic deep vein damage. 2- 40yrs and female. Typical Symptoms: 1- aching pain, discomfort 2- and tenderness of the skin (lipodermatosclerosis. 3- and pigmentation) for many months or years 4- before an ulcer appears 5- Some ulcers are painful, but many are not. 6- The discharge may be very smelly.
Ischaemic ulcers	
Arterial insufficiency is usually manifest at the ends of the limbs. It is rare to see ulcers caused by arterial disease at the base of the limbs or on the trunk.	Risk factors: 1- elderly 2- large artery obliteration: atherosclerosis,embolism,. 3- small artery obliteration: Buerger's disease, Athero-embolism, diabetes, scleroderma. 4- Physical agents such as prolonged local pressure. 5- radiation, trauma and electrical burns.. Typical Symptoms: 1- Very painful. 2- They cause rest pain. 3- Discharge a thin serous exudates, which can become purulent. Complication: They are usually indolent and often get slowly deeper and larger. Ischemic ulcers may occasionally penetrate into joints, making movements very painful.
Trophic ulcers	

A trophic ulcer is an ulcer which has developed as the result of the patient's insensitivity to repeated trauma. These ulcers are commonly associated with those forms of neurological disease which cause loss of the appreciation of pain and light touch in weight bearing areas	Risk factors: 1- **Peripheral nerve lesions:** diabetes, nerveinjuries, leprosy 2- **Spinal cord lesions:** spina bifida, tabes dorsalis and syringomyelia. Typical Symptoms: 1- The ulcers are painless 2- The surrounding tissues are unable to appreciate pain 3- The surrounding tissues may have a normal blood supply.
Neoplastic ulcers	
The ulcers caused by basal and squamous cell carcinomata	

C. Before You Begin Taking The History:

1- Introduce yourself (Hello, name, 3rd year medical student).
2- Tell the patient you will take the history of his/her ulcer.
3- Take consent.
4- Insure pricey.

D. Questions to ask the patient with this presentation

Questions
Personal Data
• **Name** • **Age** • **Nationality** • **Marital status** • **Occupation**
Chief Complaint
• **Duration** • **Route of admission** • **Time of admission**
History of presenting illness

When did you notice the ulcer? How did you notice the ulcer? (Pain, bleeding, purulent discharge, or foul smell, Some one else tell you) What is the first symptom of the ulcer? (Pain or interference with daily activity) From the time you got the ulcer did it change in size, shape, discharge or pain progression? Does it disappear or is it persistent? Are there any other symptoms coming with the ulcer (fever, weight loss, night sweats, loss of appetite)? Do you have any other ulcer anywhere else? Did you ever have an ulcer like this in the past? What do you think is the possible cause of this ulcer (trauma, systemic illness)? Risk factors (DM, HTN, Hyperlipidemia, Coronary Heart Disease, Vascular Disease)	
Past History	
• Medical: were hospitalized for a long time ? • Surgical • Medication • Allergy	Medical is important because bed-ridden patients develop pressure ulcers commonly found over bony prominences e.g. occipital, scapula , heel , and sacral bones.
Family History	
Social History	
• Smoking \alcohol?	If answer is yes ,For each one ask : • When did they start • What type of smoke/alcohol • For how long • How many per day • Did they stop and when • Did they developed any complications

E. Systematic Review

F. Summarize:

- Name
- Age
- Chief complaint
- Duration
- Important negatives

Physical Examination

A. Start the examination with:

1. Washing your hands.
2. Introducing yourself/confirm the patients ID
3. Explaining your procedure.
4. Taking the consent.
5. Privacy.
6. Positioning *there is no specific place for an ulcer depends on the site.
7. Exposing the ulcer (*any organ that comes in 2s expose them both e.g. both legs).

Inspection:

- **6Ss**:
  1. Site
  2. Size " 2dimentional →but describe the depth to make it 3D)",
  3. Shape of the margin (regular or irregular)
  4. Surrounding skin
  5. Single or multiple
  6. Surface: in lump no need to mention it here in Ulcer!
- **Margins:** color changes , necrosis , pigmentation
- **Edge:** sloping, punched out, undermined, rolled, everted.
- **Floor/Base:** color, **granulation tissue (important)** , dead tissue,blood , bone , tendon.
- **Discharge (color, amount, and smell):** serous, sanguineous, sero-sanguineous, or purulent.

Palpation: *wear sterile gloves and ask patient if there is tenderness

1. **Temperature** of the surrounding tissue (by the dorsum of the hand).
2. **Tenderness** of the surrounding tissue.
3. **Margins** of the ulcer
   a. if a small ulcer then hold with index and thumb and move it horizontally
   b. if huge then stick your fingers inside . you are looking for consistency(soft, firm, or hard)
4. **Edge** of the ulcer.
5. **Base** of the ulcer.
6. **Discharge** (as above).

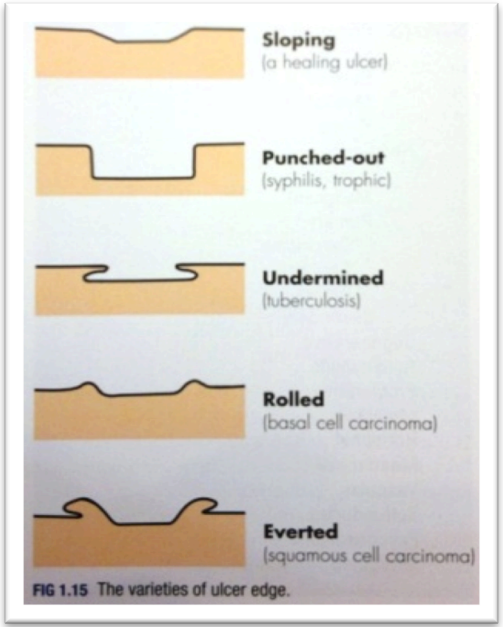

FIG 1.15 The varieties of ulcer edge.

The differential on every picture, its important!

1. **Sloping:** a healing ulcer
2. **Punched-out:** syphilis, trophic
3. **Undermined:** TB
4. **Rolled:** basal cell carcinoma
5. **Everted:** Squamous cell carcinoma

Relations:

- **Surrounding tissue:** important in the deep ulcers **(e.g. venous ulcers surrounded by hard and black skin).**
- Assess whether the ulcer is **adherent** or **invading deep structures** such as the tendons , periosteum , and bones .

B. End the examination with:

- Local lymph nodes**:** in an ulcer at the sole the nearest lymph drainage is at the popliteal area.
- Blood supply of the local tissue if arterial assess the ones above/below the ulcer for pulses and in veins you assess them only by inspection.
- Innervation of the local tissue in the aid of a cotton or tongue depressor and then compare to opposite limb or start from the point where they feel and finish with where they lost sensation
- Assess the Range of motion of the surrounding 2 joints by assess both passively (you do it) and actively (the patient does it)
- General examination.
- Thank the patient.

Notes

Describing the site is variable according to the organ involved:

In the breast:

Divide the breast into four quadrants upper/lower and then inner/outer or describe it in a clock wise pattern → then relate to the anatomical land mark which in this case is the nipple-areolar complex → so you would say the ulcer is in the left breast upper-inner quadrant or 9 O'clock 2cm from the nipple-areolar complex.

In the leg:

e.g. the ulcer is on the left leg medial and 2cm below the knee.

Mention upper/lower, anterior /posterior, medial/lateral then relate to an anatomical landmark.

Terms you should know:

- **Granulation tissue:** It is the first stage of the healing process.
- **Dead tissue:** This is called a slough. When a slough separates, it may expose healthy tissues, which then become covered with granulation tissue or tissue becoming involved in the ischemic process.
- **Tumor:** The base of a squamous cell carcinoma is the malignant tissue itself. It may be slightly vascular or necrotic but does not develop healthy granulation tissue.

You should look these pictures up and the ones in the picture:

- Basal cell carcinoma
- TB ulcer
- DM ulcer
- Pressure ulcer
- Squamous cell carcinoma
- Syphilis, trophic ulcer
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*In the OSCE it will be on picture and you explain all the above.

432 OSCE TEAM

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