

HISTORY TAKING AND EXAMINATION OF An ULCER

For medical Students – 4th year

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Definition:

An ulcer is a sore or solution (break) of the continuity of an epithelium or mucous membrane either partially or fully or even could penetrate more deeply!

(i.e. an epithelial or mucosal defect, it is not simply a wound)

❏ CLASSIFICATION OF ULCERS:

According to cause Ulcers are classified into:

A) Non-specific:

- Peptic ulcers
- Pressure sores
- Gravitational ulcers(venous insufficiency) .
- Traumatic ulcers
- Aphthous ulcers

B(Specific:

- Haemolytic Blood disease
- (infective type):
 - : Herpes simplex .
 - Tuberculous
 - Syphilis

C) Malignant:

- Gastric carcinoma
- Solitary Rectal Ulcer

History of an Ulcer:

-  **Personal History:** as usual but consider the type of your patient, residency, exposure to sunlight and type of work or smoking habits,...
-  **C/O:** patient's own words / duration of presenting symptom
-  **HPI:**
 - When was the ulcer **first noticed**?
 - What draws the patient's attention to the ulcer? eg ***Pain, Bleeding, Discharge,.....etc.***
 - **is there any other ulcer in body?** Number and sites , consequences,...
 - What are other associating **symptoms** of the ulcer?
 - How has the ulcer **changed** since it first appeared (progress)?
 - Has the patient ever had a **similar ulcer** on the same site, or **elsewhere**?
 - Any H/O trauma
 - Any **History of chronic disease** eg hemolytic anemia, TB, ... or medication (present and previous)
 - Any related disease where is the pt living and his/her previous residency
 - clinical systematic review
-  **Past History:** whether surgically or medically related (complete history of any previous similar ulcer.)
 - H/O DM or any Neurological or vascular or skin disorder
-  **Family History:** any known family disease or similar cases-
-  **What does the patient think caused the ulcer!?!?**

Examination of an Ulcer:

 After doing the General Examination and knowing the Type of your Patient:

Local examination of an Ulcer (Mainly By Inspection and Palpation, ...)	Other Areas to Examine
▪ Site ▪ Size ▪ Shape ▪ Surface ▪ Depth ▪ Base ▪ Discharge and Colour if any.... ▪ Temperature of surrounding area ▪ Tenderness of surrounding area ▪ Edge	• Relations to surrounding structures: mobility/fixity • Regional lymph glands..... • State of local tissues: - arteries, veins,.. nerves - skin, subcutaneous tissue, muscles,... • bones and joints ; nearby • General examination (if not done on the start)

(capillaries, collagen, fibroblasts, bacteria and inflammatory cells), But recognizable structures such as tendon or bone may be visible.

The Base of an Ulcer is the part of Ulcer which is **felt** around the ulcer ie Examined by **PALPATION** ✓

The cause of the ulcer can be detected by the he Nature of the floor:

- **Full- thickness death of skin** is solid **brown** or grey dead tissue
- **Syphilitic ulcers** have a slough that looks like a **yellow-grey** wash-leather.
- **TB ulcers** have a base of **bluish** unhealthy granulation tissue.
- **Ischaemic ulcers** often contain poor granulation tissue, and tendons and other structures may lie bare in their base.
- **Redness of the granulation tissue** reflects the underlying vascularity and indicates the ability of the ulcer to heal.
- **Healing epidermis** is seen as a pale layer extending in over the granulation tissue from the edge of the ulcer.

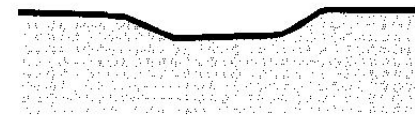
Examination the Edge of an ulcer

Definition:

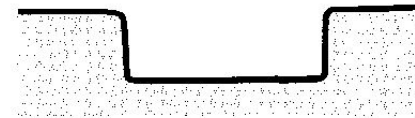
The Edge of an Ulcer is the area of union **between the Floor** of an ulcer and its surrounding tissue of epithelium or mm or some other tissue, Examined mostly by **inspection**.

Types of Ulcer Edges:

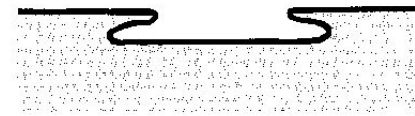
5 Types: ➡



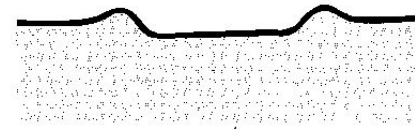
Sloping
(a healing ulcer)



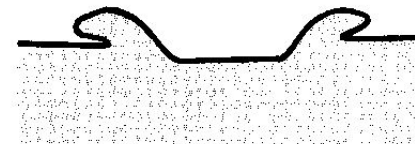
Punched-out
(syphilis, trophic)



Undermined
(tuberculosis)



Rolled
(basal cell carcinoma)



Everted
(squamous cell carcinoma)

FIG 1.15 The varieties of ulcer edge.

sloping edge Ulcer:

- Gently sloping healing ulcer edge indicates that the ulcer is shallow and this type of ulcer is usually **superficial**, often only half-way through the skin.

- **Example:**

Venous ulcers (in the **Gaiter's area**)

The new skin growing in around the edge of a healing ulcer is **pale pink** *and almost transparent*



Sloping
(a healing ulcer)



Punched-out
(syphilis, trophic)



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FIG 1.15 The varieties of ulcer edge.



Typical Venous ulcers (in Gaiter's area)

Punched-out edge Ulcer (A square-cut Ulcer):

- This follows the **rapid death** and **loss** of the **whole thickness** of the skin **without slow repair** of the defect.

eg : This form of ulcer is most often seen in the foot where **pressure** has occurred on an insensitive piece of skin, i.e. a **trophic ulcer** secondary to a **neurological defect**.

- The classic textbook example of a punched-out ulcer was the ulcer of **tertiary syphilis**,
- Most of the punched-out ulcers that are now seen are caused by:

- **neuropathy of diabetes**
- **peripheral arterial ischaemia**
- **leprosy**.

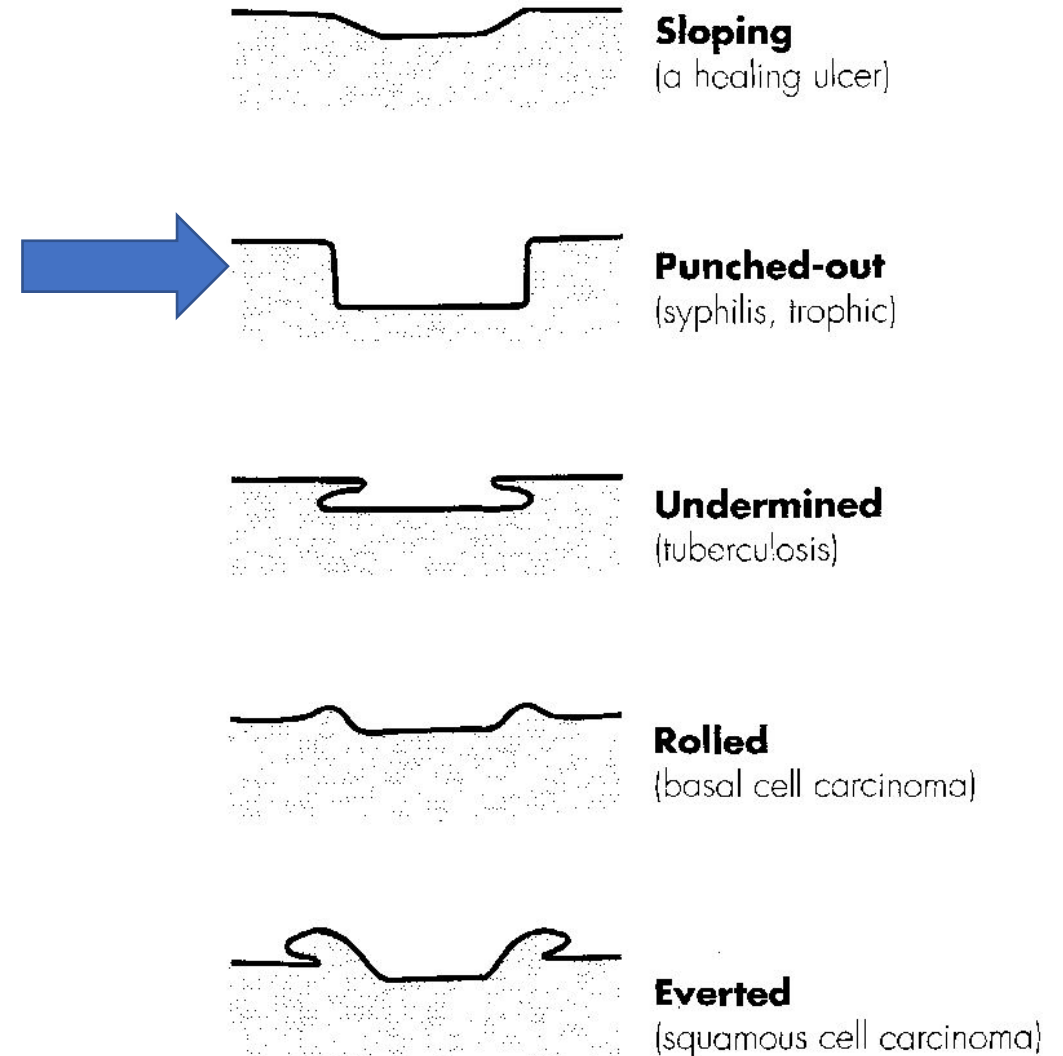


FIG 1.15 The varieties of ulcer edge.



Trophic ulcer in Diabetic Patient



Leg ulcer in sickle cell disease

Punched out Ulcers with raised edges, necrotic debris within the wound, and sloughing surrounding the ulcerated area



Tertiary syphilis

Undermined ulcer Edge

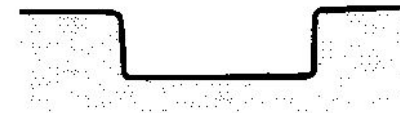
- When an infection in an ulcer affects the **subcutaneous** tissues more than the skin, the edge becomes undermined.

eg: This type of ulcer is commonly seen in the **buttock** as a result of **pressure necrosis**, because the subcutaneous fat is more susceptible to pressure than the skin;

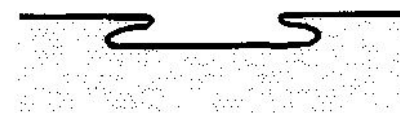
□ The classic textbook example is the **Tuberculous ulcer (TB)**



Sloping
(a healing ulcer)



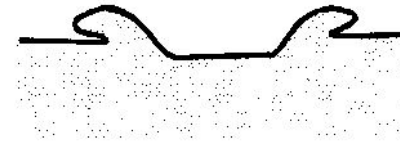
Punched-out
(syphilis, trophic)



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FIG 1.15 The varieties of ulcer edge.



Tuberculous (TB) ulcer

Rolled edge ulcer:

There is **Slow growth of tissue in the edge** of the ulcer.

The edge looks like the heaped-up **mound** around an ancient Roman earthwork.

eg.: A rolled edge is typical, and almost diagnostic, of a **Basal Cell Carcinoma (Rodent ulcer)**.

The edge is usually **pale pink or white**, with clumps and clusters of cells visible through the paper-thin superficial covering of squamous cells.

Telangiectasis are commonly seen in the pearly edge.

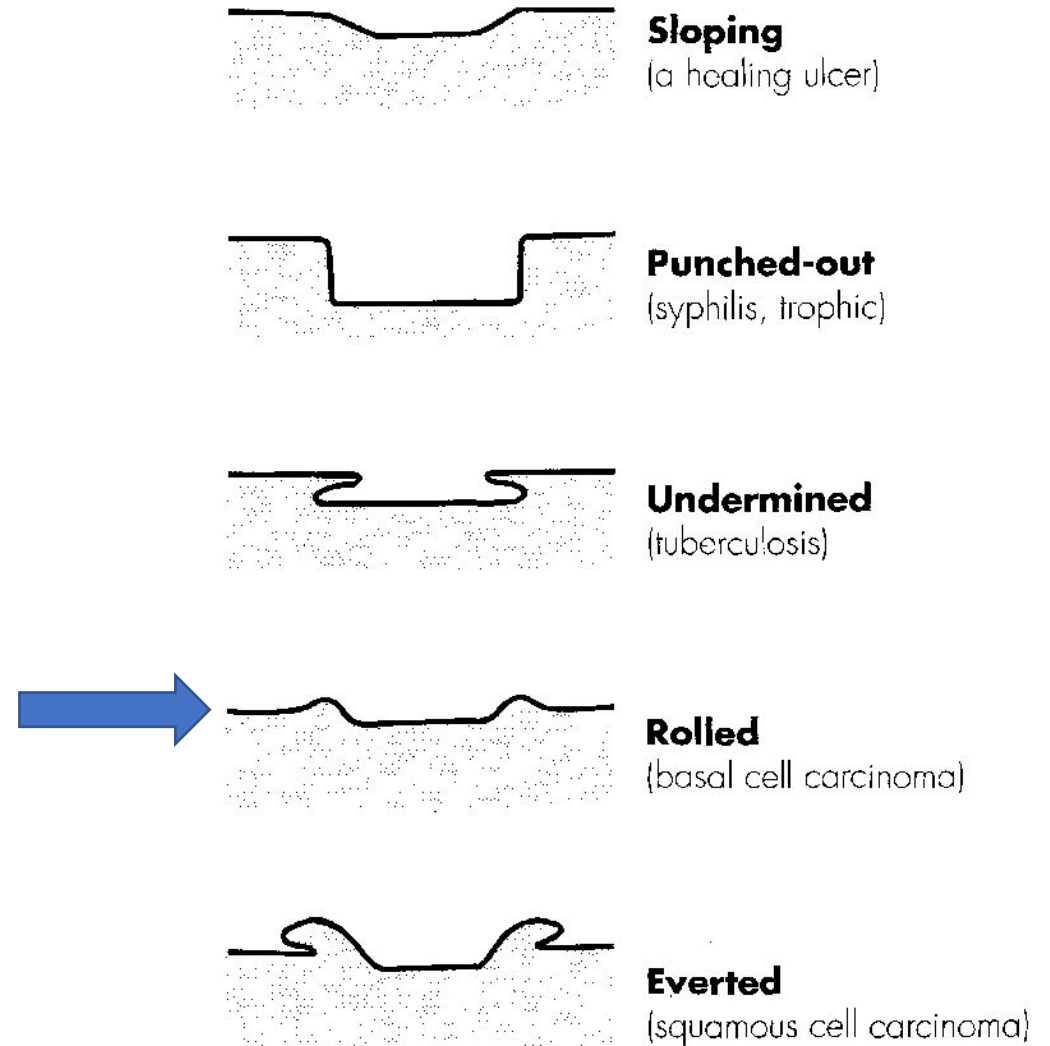


FIG 1.15 The varieties of ulcer edge.

Basal cell carcinoma



Everted edge ulcer:

- The edge of **the ulcer is growing so rapidly** that it spills out of the **ulcer to overlap** the normal skin.

eg: An everted edge is typical of **a carcinoma** and is seen in all those organs where carcinomata in :

skin, in the **bowel**, in the **bladder** and in the **respiratory tract**.

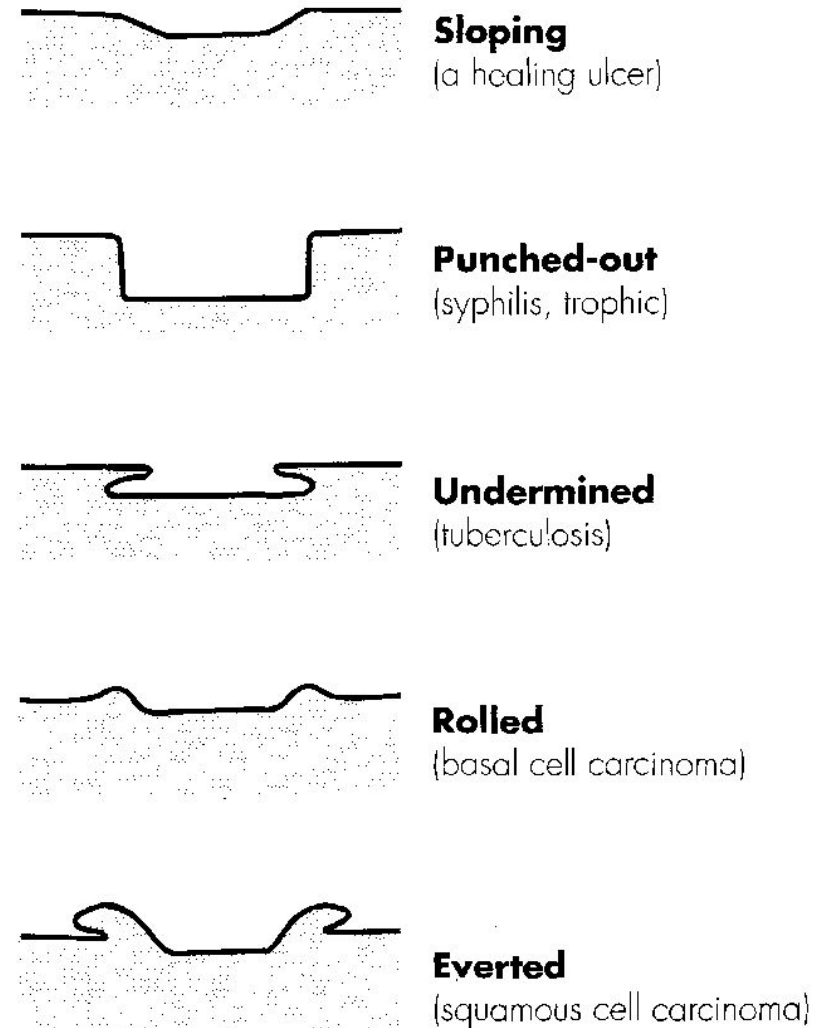
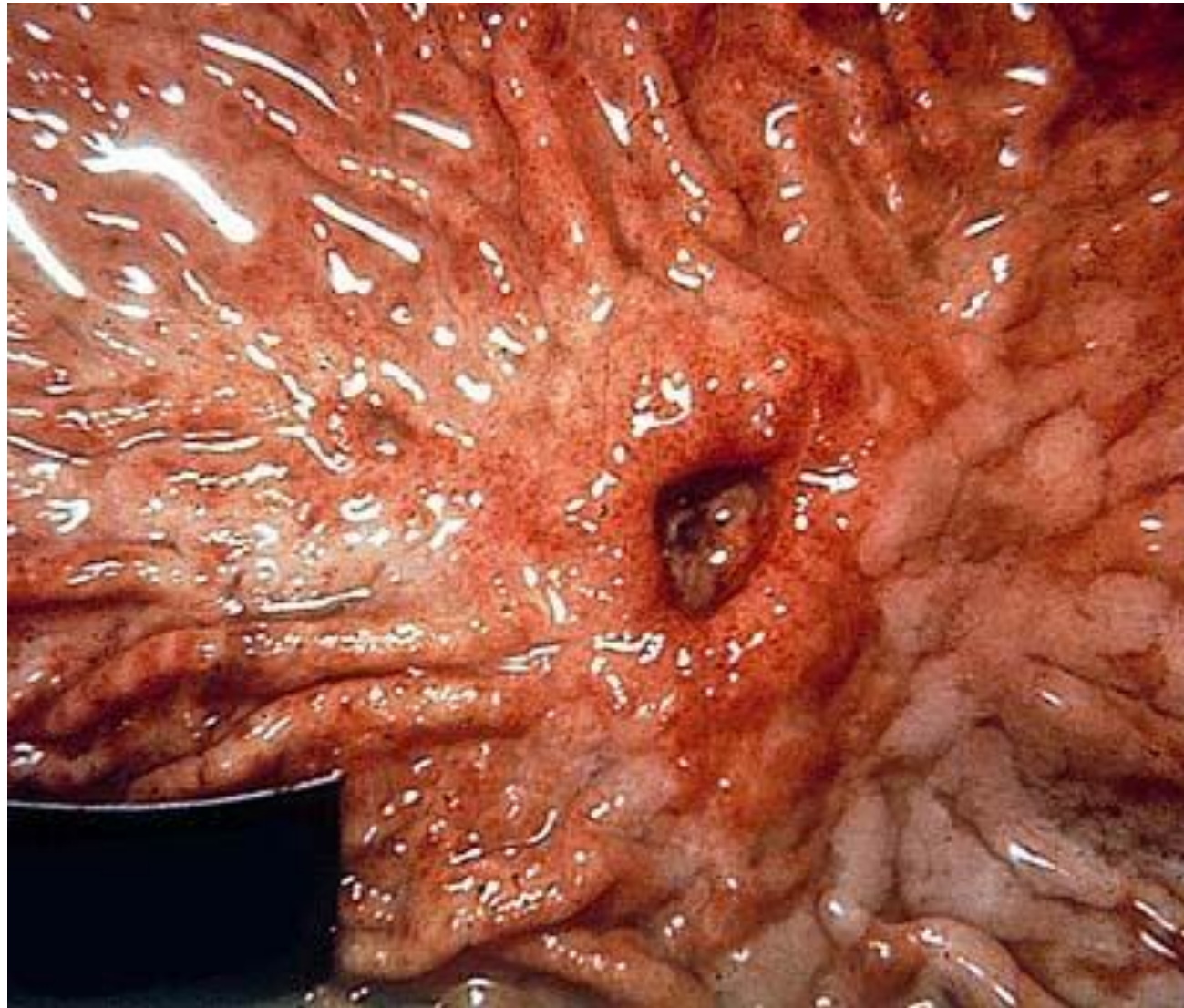


FIG 1.15 The varieties of ulcer edge.

Squamous cell carcinoma





Stomach ulcer
everted edge is typical of a carcinoma

Depth of an Ulcer:

The depth of the ulcer is measured in **millimetres**, and Anatomically by describing the structures it has penetrated or reached.....

❑ Discharge from an ulcer:

- ❑ The discharge from an ulcer may be **serous, sanguinous, serosanguinous or purulent**.
- ❑ There may be a considerable **quantity** of discharge which is easily visible, **or** it may only be apparent from inspection of the patient's dressings,
- ❑ The features of the ulcer may not be seen at all if it is covered with coagulated discharge (a **scab**).

*This may have **to be removed** to examine the ulcer properly.*

☐ Relations of the ulcer:

- ☐ Describe the relations of the ulcer to **its surrounding** tissues, particularly those deep to it.
- ☐ It is important to know if the ulcer is adherent or invading deep structures such as **tendons, periosteum and bone** — which may indicate the presence of osteomyelitis.

□ The Local and Regional lymph glands

must be carefully examined.

- They may be enlarged because of secondary **infection** or **secondary tumour deposits** and they may be **± tender**.

□ State of the local tissues:

- Local blood supply and innervation of the adjacent skin.
- Many ulcers in the lower limbs are secondary to vascular and neurological disease.

(Look for evidence of previous ulcers that have healed)

□ General examination

- This is **very important** because many systemic diseases as well as many **skin diseases** present with skin lesions and ulcers.
- Examine the whole patient with care, looking especially at their hands and facies, which can supply important clues to the diagnosis.

History Taking from a patient with an Ulcer

- History of presenting complaints Duration
- Onset
- Progression: Worsening, improving, any other Changes,...
- Features
- Pain, discharge .
- Other diseases
- Past medical history
- diabetes
- *Radiation*

Examination of a patient with an ulcer

A. General Examination

B. Local Examination

INSPECTION

- Number
- Size
- Site
- Shape
- Edge
- Margin
- Floor
- Colour
- Granulation
- Slough
- Discharge
- Depth
- Surrounding skin

PALPATION

- Size
- Temperature
- Base
- Tenderness
- Friability
- Base
- Surrounding skin
- Induration
- Tenderness
- Warmth
- Adjacent tissues
- Nodes
- Vasculature

?