

EXAMINATION OF ULCER

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Abstract: Ulcer is partial or complete loss of epithelium or skin or mucous membrane. It is performed in good light with ulcerated area properly exposed. Examination of draining lymph glands is also performed. Accurate site is recorded on the diagram of the ulcer bearing area. Accurate site is recorded on the diagram of the ulcer bearing area. It is essential to palpate the lymph glands draining the ulcerated area.

Key words: Ulcer, Rodent Ulcer, Trophic Lymph glands.

Ulcer is partial or complete loss of epithelium or skin or mucous membrane.

It may be examined with the help of a magnifying glass for having a better and amplified view.

Probing is preferably avoided as it may injure the tissue and give inaccurate information.

SPECIAL INTERVIEW

Special information is essential for correct diagnosis and proper treatment.

- Age of the patient is noted.
- Occupation of the patient is noted.
- History of onset of ulcer is asked.
- History of varicose veins is noted.
- History of peripheral ischaemia is noted.

- History of diabetes, numbness and parasthesia is noted.
- History of burns or any injury is asked.
- History of secondary deposits is noted.
- Recent change in shape and size of ulcer is noted.

Increase or decrease in size of ulcer is noted. History of discharge from the ulcer if present is noted.

Color and amount of discharge is also noted. Is the ulcer associated with;

- Pain
- Fever
- Anorexia
- Weight loss

EXPOSURE AND POSITION

The area to be examined is fully exposed.

If the ulcer is present on paired parts of the body such as limbs or the breast, opposite good side is also exposed and compared at the same time.

The patient is examined in sitting, standing or lying position.

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Marjolin ulcer over left leg

INSPECTION

It is performed in good light with ulcerated area properly exposed.

Examination of draining lymph glands is also performed.

Following features are seen and recorded:

SIZE

It is noted carefully while exact size is measured on palpation. It is variable in various ulcers depending upon the type of ulcer and duration of ulcer. It is also helpful to monitor the progress of healing ulcer or otherwise.

SITE

Accurate site is recorded on the diagram of the ulcer bearing area. It helps in planning the management and predicting the outcome of the treatment. Some ulcers have typical site such as;

- Varicose ulcers are present on the medial aspect of lower half of the leg. Most common site is near the medial malleolus.
- Gummatous (syphilitic ulcers) are seen near the knee joint, tibia, sternum, or



Ulcer of the peri anal region.



Ulcer of the peri anal region.

skull.

- Rodent ulcers are present most commonly on the upper part of the face above a line joining the angle of the mouth with the ear.
- Tuberculous ulcers are seen on the neck.
- Ulcers of lupus are seen on the face, fingers and toes.
- Perforating or trophic ulcers are usually seen on sole of foot.
- Ulcerated malignant lesions may be present any where in the body but common sites are lips, tongue, breast, anus and penis.
- Anal fissure is a chronic ulcer present at the muco-cutaneous junction of the anus.

SHAPE

Whatever the shape, round, oval or irregular. It is drawn on the diagram of the ulcer bearing area, photograph is better for future monitoring.

- Tuberculous ulcers are oval but when ulcers coalase, these may develop into abnormally variable shapes.
- Varicose ulcer is usually oval in vertical axis.
- Neoplastic ulcers are of irregular shape.
- Post-burn ulcers can be any where in the burnt area or its scar. These ulcers may present at a late stage and may change into neoplastic ulcer (Epithelioma). These are called Marjolin ulcers.

EDGE

It is noted carefully. It may be everted, undermined, raised, sloping or punched out.

Healing ulcer has typical edge and shape. It shows red, blue and white colors of granulation tissue, growing epithelium and scar fibrosis.

The ulcer shows all the features of

inflammation such as;

- Redness
- Edema
- Raised temperature
- Loss of movement
- Tenderness



Healing ulcer



Malignant Ulcer



Tuberculous ulcer



Rodent ulcer



Punched out ulcer

Edge of tuberculous ulcer is undermined, thin and hollow.

Edge of epithelioma or squamous cell carcinoma is raised and rolled out.

Edge of Rodent ulcer is raised, pearly white, beaded and may or may not be everted.

Edge of Gummatous ulcer is thick and clearly punched out.

The edge of a perforating ulcer is deeply punched out and corny.

FLOOR

It is the exposed area (denuded area) of the ulcer. It is seen for pus, slough, debris, dead tissue or healthy granulation tissue.

Trophic ulcer may penetrate into deep structures such as bone which will form its floor.

Squamous cell carcinoma has a fungating or cauliflower appearance.

Ulcerated malignant melanoma may have black color floor.

SURROUNDING TISSUE

Signs of inflammation such as raised temperature, tenderness, edema, induration and redness are noted. It is observed very carefully for;

- Signs of inflammation.
- Color of the surrounding skin.
- Presence of varicose veins.
- Presence of pigmentation.
- Features of peripheral ischaemia.

PALPATION

The findings of the inspection are confirmed

by feeling the ulcer carefully.

One should wear thin sterilized gloves while examining the ulcers for good hygiene and to avoid contamination.

Exact measurement of the ulcer is done in both dimensions and recorded in centimeters from the marked points at the periphery (edge) of the ulcer.

Repeated photographs are more helpful in monitoring the disease process.



Malignant ulcer (left foot)



Ulcer of the tongue

BASE OF THE ULCER

It is the part of tissue over which the ulcer lies. It is palpated to find out its fixity to the underlying structures and presence of

induration.

Slight induration is seen in chronic ulcers and marked induration is felt in squamous ulcers.



Ulcer over the lower lip and tongue



Ulcer over the tongue

LYMPH GLANDS

It is essential to palpate the lymph glands draining the ulcerated area.

Their number, nature, size, fixity to underlying structures and overlying skin is noted and recorded.

CIRCULATION

Assessment of the circulation of ulcerated area is performed. All arterial pulses proximal and distal to the ulcer area are palpated and recorded. Ischaemia may be the cause of

ulceration.

NERVE SUPPLY

Neuronal examination of the area is performed to find out the cause of ulceration (Trophic ulcer).

TYPES OF ULCERS

Various ulcers seen in surgical practice are;

- Post burn ulcer
- Traumatic ulcer
- Varicose ulcer
- Ulcer due to entero-cutaneous fistula
- Post thrombotic ulcer
- Trophic ulcer
- Tropical ulcer
- Tuberculous ulcer
- Lupus vulgaris or cutaneous tuberculous ulcer
- Condyloma
- Soft chancres
- Meleny's ulcer

ASSESSMENT OF ULCER

Duration	When was it first noticed
First Symptom	How did it start and has it increased or decreased in size?
Other Symptoms	What symptoms does it cause?
Progression	How has it changed since noticed first?
Associated Diseases	Has patient any other disease related to ulcer?
Multiplicity	Has the patient any other ulcers?

Inspection

Size
Site
Shape
Edge
Floor
Skin overlying (color/ulcer/sinus)

Palpation

SurfaceEdge/margins
Consistency (hard/firm/soft)
Temperature
Base of ulcer
Surrounding skin

Associated Examination

Lymph nodes
Distal pulses
Distal nerves