

Ulcerative Vesiculobullous Lesions

Q1. Define ulcer, vesicle, macule, papule, pustule, plaque, bulla and nodule with examples.

Ans. • Ulcer: A defect in the epithelium; it is well circumscribed depressed lesion over which epidermal layers has been lost with molecular necrosis. It is also described as break in the continuity of epithelium due to molecular necrosis.

For example, aphthous ulcer, traumatic ulcer, herpetic ulcer.

- **Macule:** Well circumscribed, flat lesions that are noticeable because of their change from normal skin color. May be red due to presence of vascular lesions or inflammation, or pigmented due to presence of melanin, hemosiderin, drugs.

For example, haemangioma.

- **Papule:** Solid lesions, raised above the skin surface that are smaller than 1 cm diameter.

For example, erythema multiforme, rubella, lupus erythematosus.

- **Plaque:** Solid raised lesions that are over 1 cm in diameter; they are larger papules

For example, leukoplakia.

- **Bulla:** Elevated blisters like lesions containing clear fluid that are over 1 cm in diameter.

For example, pemphigus.

- **Nodule:** These lesions are present deep in the dermis and the epidermis can be easily moved over them.
For example, fibroma.
- **Pustule:** Raised lesions containing purulent material.

Q2. What are erosions?

Ans. Moist red lesions often caused by the rupture of vesicles or bullae as well as trauma.
Example: Oral lichen planus.

Q3. Give examples of ulcers caused by viral infection.

Ans.

- Herpes simplex infection
- Herpangina
- Measles (paramyxovirus—Koplik's spots)
- Herpes zoster
- Hand-foot and mouth disease
- Infectious mononucleosis
- HIV-AIDS

Q4. Give example of ulcers caused by bacterial infection.

Ans.

- Syphilis
- Tuberculosis
- ANUG
- Gonorrhea
- Leprosy
- Actinomycosis
- Noma
- Scarlet fever
- Diphtheria

Q5. Give examples of ulcers caused by fungal infections.

Ans.

- Histoplasmosis
- Blastomycosis
- Mucormycosis
- Cryptococcosis

**Q6. Types of edges in different types of ulcers.**

- Ans.**
- Gumma punched out
 - Healing/venous ulcersloping
 - Malignant ulcer rolled out
 - Rodent ulcer (basal cell carcinoma)—beaded
 - Tuberculosis—undermined

Q7. Ulcers associated with immunologic defects:

- Ans.**
- Pemphigus
 - Cicatricial pemphigoid
 - Bullous pemphigoid
 - Dermatitis herpetiformis
 - Linear IgA disease
 - Epidermolysis bullosa acquisita
 - Erythema multiforme

Q8. Acute multiple vesiculobullous lesions:

- Ans.**
- Herpes virus infection
 - Aphthous ulcer
 - Primary herpes simplex virus infections
 - Coxsackievirus infections
 - Varicella zoster virus infection
 - Erythema multiforme
 - Contact allergic stomatitis
 - Oral ulcers secondary to cancer chemotherapy
 - Acute necrotizing ulcerative gingivitis

Q9. Chronic multiple vesiculobullous lesions:

- Ans.**
- Pemphigus vulgaris and vegetans
 - Bullous pemphigoid
 - Mucous membrane pemphigoid
 - Erosive lichen planus
 - Linear IgA disease
 - Chronic herpes simplex infection in cancer chemotherapy, immunocompromised states and HIV.

Q10. Lesions associated with single ulcers.

- Ans.**
- Histoplasmosis
 - Blastomycosis
 - Mucormycosis
 - Syphilitic ulcer
 - TB ulcer
 - Malignant ulcer
 - Traumatic ulcer

Q11. What are characteristic features of herpetic ulcers?

- Ans.**
- **SRSS:** Smooth, round, shallow and symmetrical
 - **Drops of dew appearance**
 - **Moon crater appearance**
 - Associated with gingivostomatitis
 - Age 6 months to 6 years

Q12. Which are DNA viruses?

- Ans.** There are 6 viruses: HSV 1, HSV 2, HZV, cytomegalovirus, EBV, HHV.

Q13. Which are RNA viruses?

- Ans.** Coxsackievirus, HIV and hepatitis B.

Q14. Why is aspirin contraindicated in primary HSV?

- Ans.** Reye's syndrome (liver damage in children)

Q15. HSV is associated with which ganglions?

- Ans.**
- Trigeminal ganglion
 - Dorsal root ganglion

Q16. Treatment of primary HSV infection:

- Ans.**
- Doses: Topical acyclovir
 - If systemic then, acyclovir 200 mg, 5 times daily
 - For children—15 mg/kg body weight
 - Liquid intake and topical anaesthetics.

**Q17. Various HSV related lesions:**

- Ans.**
- Primary herpes simplex infection
 - Recurrent herpes labialis (Recrudescent HSV)
 - Herpetic whitlow
 - Herpetic barbae
 - Herpetic paronychia
 - Herpetic gladiatorum

Q18. What is Coxsackievirus infection?

- Ans.**
- Term “Coxsackie” is from a town in New York (name from where it was 1st discovered)
 - Coxsackie group A lesions are herpangina (*coxsackie A 6, 8, 10*)
 - Hand, foot and mouth disease *coxsackie A16*
 - Acute lymphonodular pharyngitis (*coxsackie A10*) and rarely mumps like parotitis.

Q19. Lab diagnosis of HSV:

- Ans.**
- Cytology—syncytium formation
 - Viral isolation
 - Antibody titers (convalescent sera-4 fold rise = Acute infection)
 - Co-Paul test

Q20. Dose of steroids in herpes simplex infection:

Ans. Steroids are contraindicated.

Q21. Characteristics of herpangina:

- Ans.** Epidemic—June to October
- Mainly young
 - Less severe symptoms than HSV

Q22. Differences between HSV and Herpangina**Ans.**

<i>HSV</i>	<i>Herpangina</i>
1. Severe	1. Milder
2. Non-epidemic	2. Epidemic
3. Anterior portion of mouth esp. gingiva	3. Posterior portion e.g. palate
4. Gingivitis	4. No-gingivitis
5. larger SSSR	5. Smaller lesions Macule- papule-vesicle-ulcer
6. DNA virus	6. RNA virus
7. HSV	7. A4 Coxsackie
8. Cytology shows multi-nucleated Tzanck cells	8. Absence of multi-nucleated giant cells
9. Management: Specific antiviral for 1 ⁰ HSV	9. Self limiting and supportive treatment needed

Q23. Difference between HSV and EM.**Ans.**

<i>HSV</i>	<i>EM</i>
1. SSSR*	1. LIDB*
2. Prodromal symptoms (period—2 to 8 days) Fever before	2. Fever may sometimes accompany (no prodromal symptoms) Sudden acute explosive onset
3. Age—primary 6 month to 6 yrs	3. Age—younger adults
4. Etiology—viral	4. Hypersensitivity reaction
5. Marginal gingivitis	5. No gingival involvement Lips prominently involved
6. Cervical lymphadenopathy -+nt	6. -nt
7. No target/bull's eye lesion	7. Target/bull's eye lesion

*SSSR: Smooth, round, shallow, symmetrical

*LIDB: Large, irregular, deep and bleeding

Q24. Difference between HSV and HZV.**Ans.**

<i>HSV</i>	<i>HZV</i>
1. Lesions do not heal by scarring	1. Scarring +nt
2. No osteonecrosis	2. In severe—osteonecrosis
3. HSV – 1° and 2° RHL and RIOH	3. VZ – 1° chickenpox and HZ
4. Bilateral	4. Unilateral
5. Prodromal symptoms; fever, malaise No pain only tingling.	5. Prodromal symptoms shooting pain, burning paraesthesia and tenderness along the nerve area—C ₃ , T ₅ , L ₁ , L ₂ No H/o fever
6. Cytology—Tzanck cells	6. Non-specific cytology
7. Rx acyclovir 200 mg 5 times a day	7. Rx acyclovir 800 mg 5 times a day

Q25. Infections caused by varicella zoster virus.

Ans. Primary-chickenpox (varicella) which remains dormant in dorsal root ganglia and can reactivate in immuno-suppressive states to causes unilateral vesicles and pain along the course of the nerve causing secondary infection, i.e herpes zoster /Shingles. It involves the trigeminal nerve and C3, T5, L1 and L2. These vesicles resemble **Dew Drops on Rose Petal**.

Q26. Complications of herpes zoster.

Ans.

- Unilateral pain in herpes zoster without lesions is called zoster sine herpette /zoster sine eruption)
- Hutchinson sign: It is cutaneous zoster infection of the side of tip of nose.
- Syndrome associated: Ramsay Hunt syndrome [triad of ipsilateral facial paralysis, ear pain and vesicles on face on the ear is typical presentation]
- Post-herpetic neuralgia (unilateral pain lingering for more than a month)