Sexually Transmitted Diseases

EPIDEMIOLOGY • SYPHILIS • GONORRHEA • CHLAMYDIA **KMU FINAL YEAR MBBS**

1. EPIDEMIOLOGY & GOLDEN FACTS

- **Most common STD worldwide:** HPV (Viral).
- **Most common bacterial STD:** Chlamydia.
- **Most common ulcerative STD:** HSV.
- **Highest HIV transmission risk:** Genital ulcer diseases.
- **Infertility cause:** Chlamydia is the most common cause.
- **Screening in Pregnancy:** Syphilis & HIV are mandatory.

2. SYPHILIS (THE GREAT IMITATOR)

Organism: Treponema pallidum.

STAGES:
- **Primary:** Painless, indurated chancre (Heals in 3-6 weeks). Firm, non-tender nodes.
- **Secondary:** Maculopapular rash (Palms/Soles), Condyloma lata (Infectious), Patchy alopecia.
- **Tertiary:** Gummas (Skin/Bone), Aortitis (Ascending), Neurosyphilis.

Neurosyphilis:
- **Tabes Dorsalis:** Loss of vibration/proprioception.
- **Argyll Robertson Pupil:** Accommodates but does NOT react to light.

🚨 **SYPHILIS DIAGNOSIS & TREATMENT**
Screening: VDRL / RPR (Monitor treatment with VDRL).
Confirmatory: FTA-ABS / TPHA.
False Positive VDRL: SLE, Pregnancy, Malaria.

Treatment:
• Benzathine Penicillin G (Drug of Choice).
• Reaction: Jarisch-Herxheimer (Acute fever after Rx).
• Congenital Signs: Snuffles, Hutchinson teeth, Saddle nose.

3. GONORRHEA

Organism: Neisseria gonorrhoeae (Diplococci, Intracellular).
Features:
- **Males:** Purulent discharge.
- **Females:** Asymptomatic cervicitis -> PID -> Infertility.
- **Disseminated (Triad):** Dermatitis, Tenosynovitis, Arthritis.
- **Neonatal:** Ophthalmia Neonatorum.

Diagnosis: NAAT (Gold Standard).
Treatment: Ceftriaxone (+ Azithromycin for Chlamydia coverage).

4. CHLAMYDIA

Buzzword: Obligate Intracellular (Energy parasite).
Key Fact: Most common silent PID & Preventable infertility.
Reiter Syndrome (Triad): Arthritis + Conjunctivitis + Urethritis (HLA-B27 associated).
Neonatal: Pneumonia (Staccato cough).
Treatment: Azithromycin or Doxycycline.

5. LYMPHOGRANULOMA VENEREUM (LGV)

Organism: Chlamydia L1-L3.
Sign: Groove Sign (Pathognomonic).
Progression: Painless ulcer -> Painful Inguinal Buboes.
Treatment: Doxycycline.

Genital Ulcers & Viral STDs

HERPES • CHANCROID • HPV • VAGINITIS **KMU FINAL YEAR MBBS**

6. GENITAL ULCER DIFFERENTIALS

Disease	Ulcer Features	Nodes	Organism
Herpes (HSV)	**Painful** vesicles, Erythematous base.	Tender	HSV-2
Syphilis	**Painless**, Indurated (Hard).	Non-tender	T. pallidum
Chancroid	**Painful**, Soft, Undermined edges.	Painful Buboes	H. ducreyi
Granuloma Inguinale	Beefy Red, Bleeds on touch, **Painless**.	None	K. granulomatis
LGV	Small Painless ulcer.	Groove Sign	Chlamydia L1-3

7. HERPES SIMPLEX (HSV)

- **Latency:** Sacral Ganglia (Recurrent).
- **Diagnosis:** PCR (Gold standard). Tzanck smear shows Giant Cells.
- **Treatment:** Acyclovir (No cure).
- **Pregnancy:** C-Section if active lesion at delivery.

8. HUMAN PAPILLOMA VIRUS (HPV)

Strains:
- **6, 11:** Low risk -> Condyloma Acuminata (Warts).
- **16, 18:** High risk -> Cervical Cancer.

Histology: Koilocytosis (Halo cells).
Mechanism: E6 inhibits p53; E7 inhibits Rb.

9. VAGINITIS TRIAD

1. Bacterial Vaginosis (BV):
- **Discharge:** Fishy odor, thin.
- **Diagnosis:** Clue Cells, pH > 4.5, Whiff test.
- **Rx:** Metronidazole.

2. Trichomoniasis:
- **Discharge:** Green, Frothy.
- **Sign:** Strawberry Cervix.
- **Rx:** Metronidazole (Must treat partner!).

3. Candidiasis:
- **Discharge:** Curdy White.
- **Symptom:** Severe Itching.
- **pH:** Normal (< 4.5).
- **Rx:** Fluconazole.

10. HIV PEARLS

- **Screening:** ELISA.
- **Confirmatory:** Western Blot.
- **Window Period Marker:** p24 antigen.
- **Opportunistic Infection:** PCP if CD4 < 200.
- **PEP:** Start within 72 hours.

🚨 **KHILJI'S "EXCEPT" TRAPS**
- **Painful Chancre: Is NOT Syphilis (Likely Chancroid/Herpes).**
- **Gonorrhea: Does NOT ferment maltose (Meningococcus does).**
- **Chlamydia: Has NO muramic acid.**
- **HPV: Does NOT cause ulcers (Causes warts).**
- **Trichomonas: Alcohol is contraindicated during Metronidazole Rx.**