

GENITOCOCAL DYSPLASIAS :-

CIP -

Male :- white pms discharging through urethra.
h/o exposure

Female :- clo mucopurulent vaginal discharge
Gls - kidney shaped cone

Caustic Agent + Neisseria gonorrhoea **GG**

Lab Diagnosis :-

① Specimen Collection :-

→ Urinal smears in men & cervical smears in women.
(Dansen & rayon smears)

② Transport Media :-

⇒ Chilled cooled smears kept in Stuart's medium.
⇒ Chilled containing medium - Amies medium
JEMEC or NEWBARK devices

③ Microscopy :-

GN in inhalation kidney shaped diplococci.

④ Culture :- Thayer Martin medium (chocolate agar with Acetablastic)

⑤ Identification - Gramococci are catalase & oxidase positive
Gram neg. & ferment methyl red or UTICR

⑥ Molecular :- NAAT - PCR

Complications -

Male - epididymitis, proctitis, balanitis
Female - salpingitis, PID. → sterility

Reiter's + perioperative foulsmell
(Fitz Hugh syndrome)

DOC :- Third gen cephalosporin.

Ceftriaxone - 250mg q 1m - single dose.
Cefixime - 400mg - orally - single dose.

Prophylaxis

- 1) Early detection
- 2) Rx of both partners
- 3) Tracing of contacts
- 4) Health education about safe sex practices.

NON-GONORRHOEA
Chemie sensitive culture gonococcal cannot be demonstrated.

Bacteria - *Chlamydia trachomatis* (mic agent of NAU)
Haemophilus mycrophasma :- *Mycrophasma*
Mycobacterium & *Mycophasma hominis*

Virus :- *Kyber* *Simpson Virus*, - genital *Kyber*

Fungi :- *Candida albicans*
Trichomonas vaginalis

UTI:

Pt Clo - female - high grade flora with shells rigor.
degraded, ↑ in micro study → pen cells with bacilli
culture - lactose fermenting colonies on Mac

Smiley - *Agar* :-

- Agar :- *E. coli* - m/c → 70%
Staphylococcus
Enterococci

Sample Collection :- Urine should be voided in a wide mouth screw capped bottle

① Clean voided midstream urine

② Suprapubic aspiration - most ideal, infants or crura p.p.

③ Catheterized patients - catheter tube after clamping distally & disinfecting

Transport :- Refrigerate at 4°C or store by oxidizing Boie ACB (alcohols)

DIRECT EXAMINATION:

- ① Wet mount - to demonstrate protozoa.
- ② Leukocyte esterase test :- secreted by protozoa in urine.
- ③ Nitrate reduction test (Griss test) - *E. coli* → positive.
- ④ Gram stain - not reliable.

CULTURE :-

Culture media - CLED agar
(cysteine, lactose electrolyte deficient)

Significant bacteriuria $\geq 10^5$ CFU.

10⁴ - 10⁵ - doubtful
low $< 10^4$ \rightarrow significant when Pta is on antibiotics or diabetic pt.

- ③ Some gram positive org like S. aureus.
- ③ Pyelonephritis & acute urethral syndrome.
- ③ Sympyche organism ② Catheterised pt.

ANTIBODY COATED BACTERIA TEST :-

\rightarrow UPPER UTI :- AB coated bacteria detected by immunofluorescence

\rightarrow LOWER UTI \rightarrow ③

Rx :- Quinolones - Norfloxacin
Nifuroxanthen
Leptofloxacin
Aminoglycosides

Colony appearance - E. coli & K. - pink - MacConkey
Yellow - CLED

Non-lactose fermenters - pink
Acid to bacteria - pale

Identification - MALDI-TOF or VITEK

A&T - urine dipstick test (MHA)
Automated mic - CUTEK

① Precipitating factors :-

① Female ② Age > 70 ; m - infants & elderly

③ Pregnancy ④ Structural & functional abnormality.

Renal & urothelium stones \downarrow neurogenic bladder

③ Catheters ④ Bacterial virulence

③ Vesico urethral reflux.

CHANCREOID :- Hemophilus influenzae

(soft chancre)

- Painless genital ulcer that heals easily.
- no inflammation & surrounding skin.
- enlarged, tender inguinal nodes (Buboes)
- IP: 4-7 days

LAB DIAGNOSIS:-

Specimen: Exudate or swabs from the edge of the ulcer & lymph node aspirate.

② DM: pleomorphic gram negative coccobacillus. occurs in groups or parallel strands.

⇒ Short fish or Rail Road Track appearance

③ Culture: H. ducreyi requires factor X (Chenkin) Rabbit hind agar or chocolate agar (1% Isovitalein) + vancomycin

④ Optimum condition - 18-20°C (35°C) (2-5 days)

⑤ Colony morphology - small, gray, filamentous 1-2mm in size in 2-3 days.

⑥ Biochemically inert.

⑦ SAT ⑧ Multisensitive

• DOL = 12-14 days
AET - 1-2 weeks, 2-3 weeks

LYMPHOGRANULOMA VENERUM

CA: - Chlamydia trachomatis

1st stage - Painless develops on penis or vulva after an IP of 3 days to 6 weeks.

2nd stage = BUBO - inguinal lymph nodes become enlarged. tender soft

⇒ fistulae
⇒ groove sign (VIL)

3rd stage = Rectal Stricture.

Diagnosis - NAAT
ATB - EUSO

CHAMBERLAIN'S REVIEW OF MICROBIOLOGY