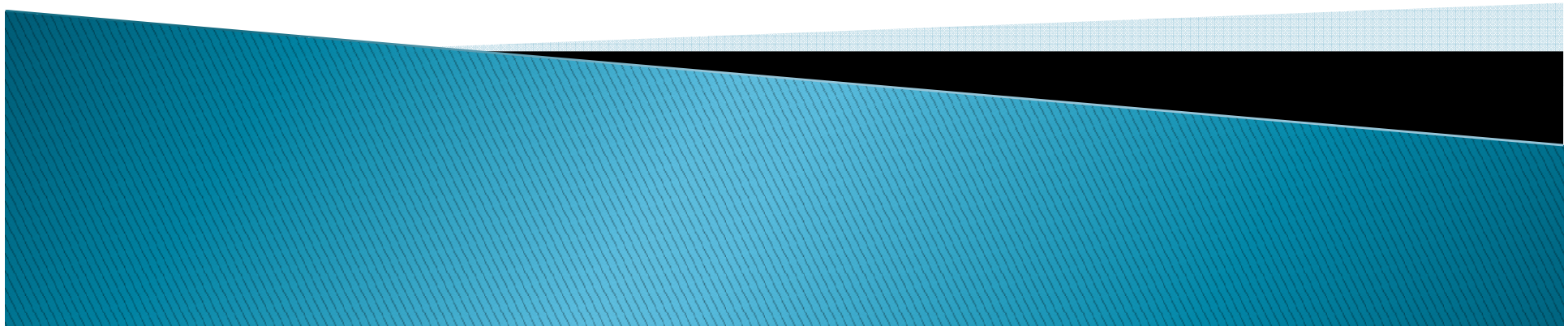


Genital tract infection

By

Asmaa kadhim



Defence Mechanism Against Ascent of Infection (Natural Barrier)

- **Vulva:**
 - Apocrine glands: modified sweat glands → fungicidal acid
 - Apposition of labia closes introitus
- **Vagina:**
 - Apposition of anterior and posterior walls
 - Stratified squamous epithelium resistant to infection
 - Vaginal acidity
 - Flora: the G+ve **Doderlein's bacilli** splits glycogen into lactic acid
- **Cervix:** closed by bacteriolytic cervical mucus
- **Uterus:** Periodic endometrial shedding during menstruation eliminates any infection

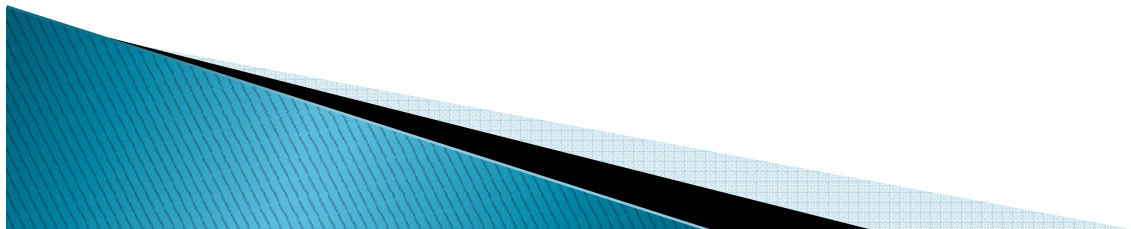
Vaginal discharge

Non infective

- physiological
- foreign body
- benign and malignant disease

Infective

- sexually transmitted
GC ,Chlamydia ,Trich., syphilis ,HSV
,HPV ,HIV)
- non sex. transmitted
BV and VVC



BACTERIAL VAGINOSIS

Non sexually transmitted infection ▶

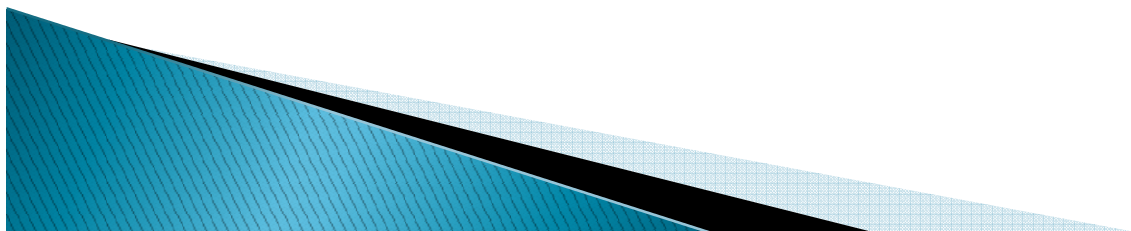
Most common infection 5–50%

Cause not definitive

reduction in lactobacilli

Gardenella vaginalis

Presented as thin offensive homogenous vx discharge



Diagnosis

Amsel criteria (3 of 4)

Thin homogenous vx discharge

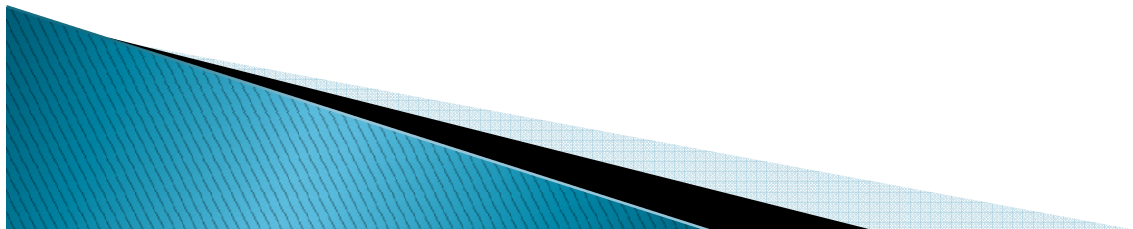
Amine wiff test

High vx PH

Clue cell on microscopic exam

Nugent criteria

bacteriological culture (high vx swab)

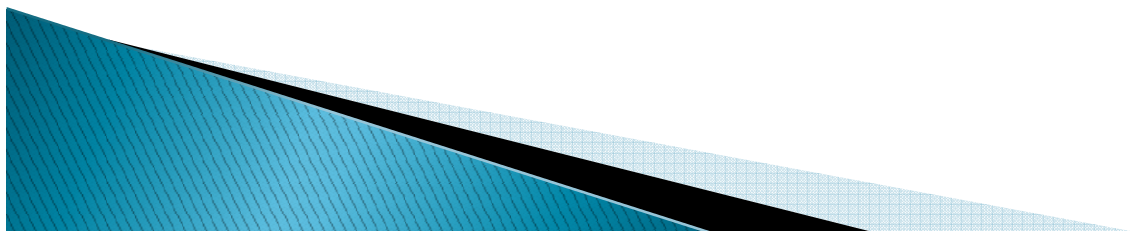


Risk factors

Douching of vagina , Black race ,
Smoking
New partner

Treatment

oral or intravaginal metronidazole or
clindamycin
avoid douching



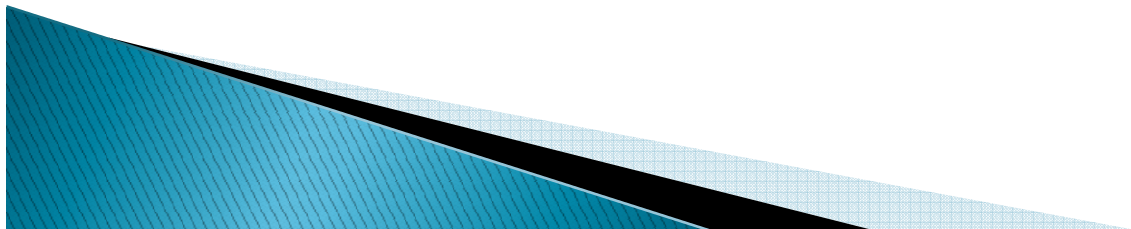
Complications

Gynecological

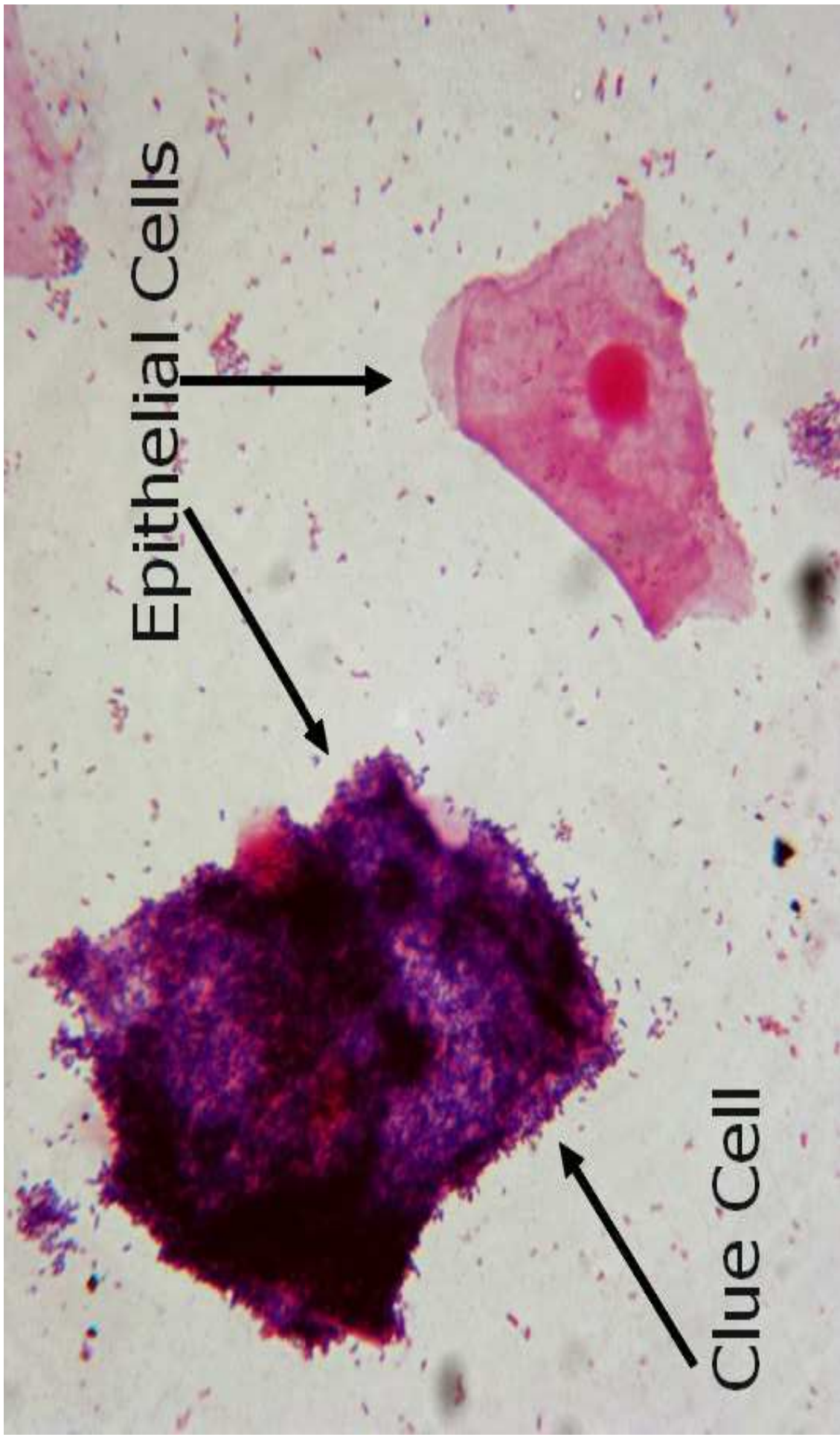
- Pelvic inflammatory disease
- Post hysterectomy cellulitis
- Increase HIV susceptibility

Obstetrical

- Misscarriage
- PTL
- PROM



Bacterial vaginosis



VULVOVAGINAL CANDIDIASIS

Not sexually transmitted

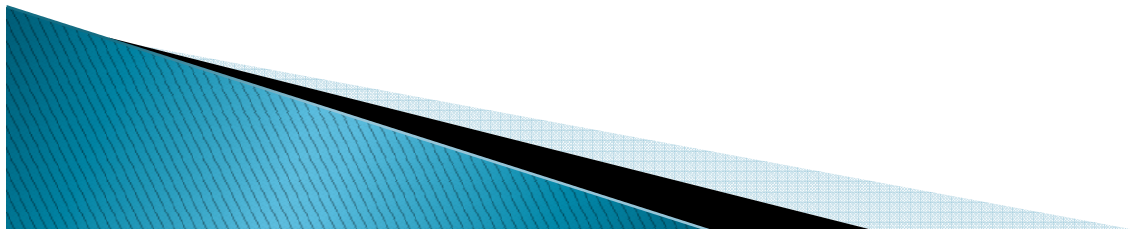
Caused by Yeast *C. albicans*

Incidence

20 % of non pregnant
40% in pregnant ladies

Sign and symptoms

Asymptomatic
Itching ,whitish cheesy discharge ,
erythema ,odema .fissuring of vulva and
vagina



Risk factors

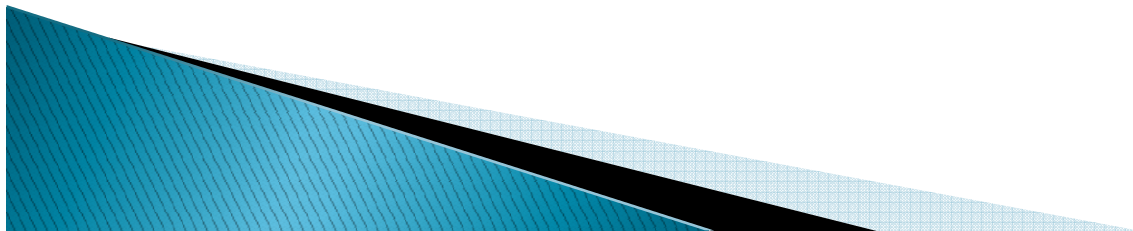
pregnancy , diabetes
,immunocompromized
, antibiotic therapy

Diagnosis

Vaginal swab for microscopic and culture
examination

Treatment

Topical or systemic antifungal imidazole
No need to treat partner



CANDIDIASIS



CANDIDIASIS



TRICHOMANIASIS

Sexually transmitted infection

Caused by parasite called *T. vaginalis*

Sign and symptoms

- 50% asymptomatic

- Variable vaginal discharge ,frothy with strawberry appearance of cervix

Diagnosis

- gold standard is NAAT

- Direct microscopic exam of vx ,endocervical or urine sample

Complication

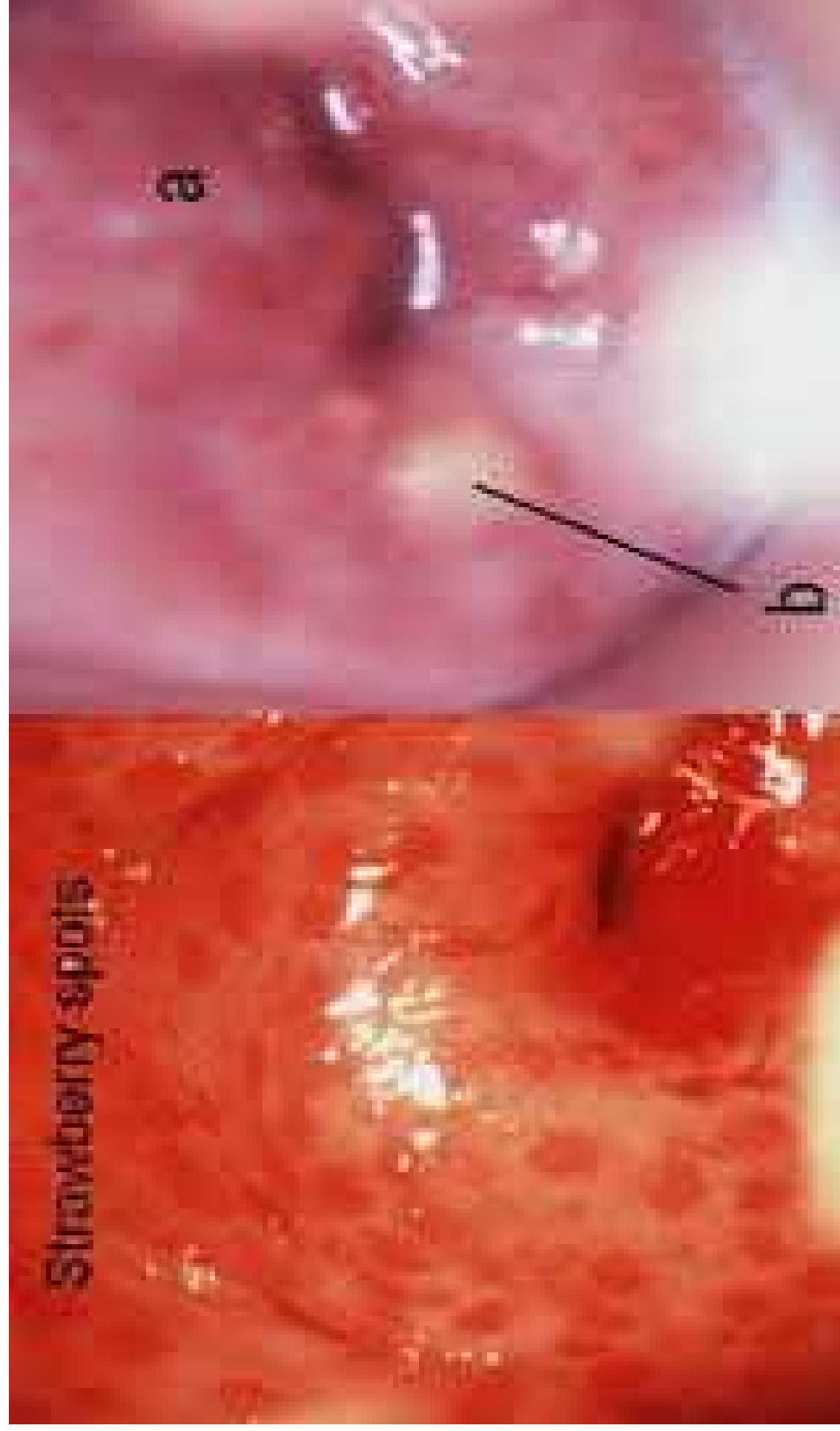
- Associated with other STI

- PTL ,LBW , Puerperal sepsis in pregnancy

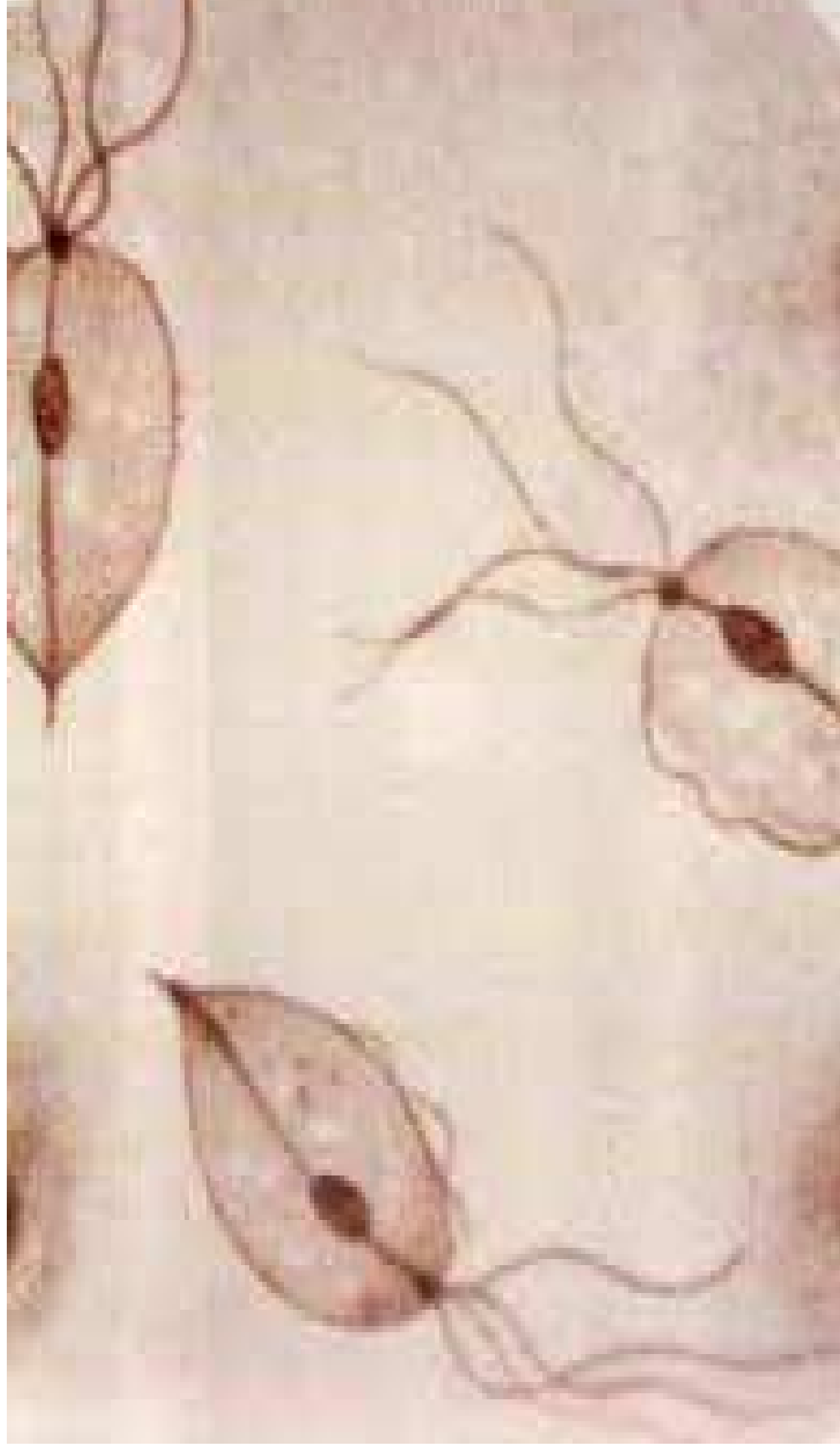
Treatment

- systemic metronidazole

Trichomoniasis



Trichomoniasis



GONORRHEA

infection is sexually transmitted

Caused by *N.gonorrhoea* (intracellular diplococci)

Sign and symptoms

50% asymptomatic

Mucopurulent vaginal discharge ,abdominal pain
pharyngitis

Diagnosis

NAAT

Culture and sensitivity

Complications

PID ,hematogenous spread (disseminated gonococcal infection)

Arthritis (monoarticular affect weight bearing joint)

Neonatal infection during labour

Treatment

Parantral 3rd generation cephalosporine + single dose of Azithromycin

Screening for other STI

CONNOBRIEA



FEMALE



MALE

CHLAMYDIA

Most common STI

Caused by ch.trachomatis

Sign & symptoms

Asymptomatic

Usual age <25 year and new partner

Vaginal discharge ,intermenstural
and post coital bleeding

Abdominal pain

Diagnosis

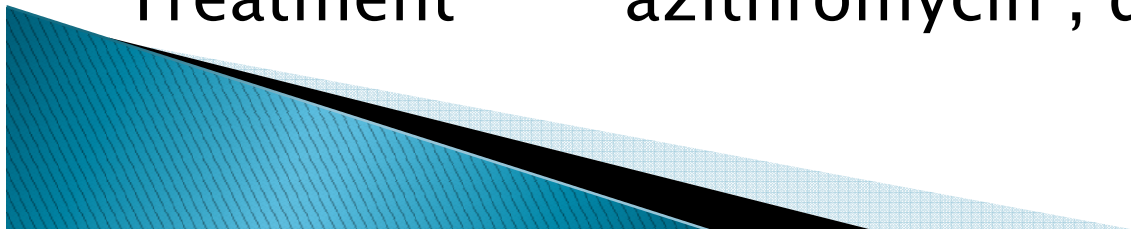
NAAT and swab culture

Complication

PID , infertility ,Neonatal
conjunctivitis ,
arthritis

Treatment

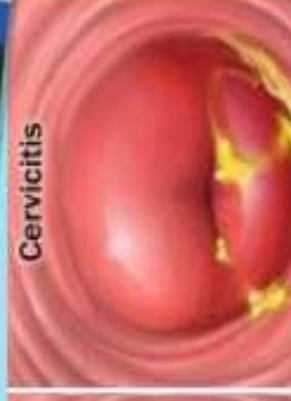
azithromycin , doxycycline



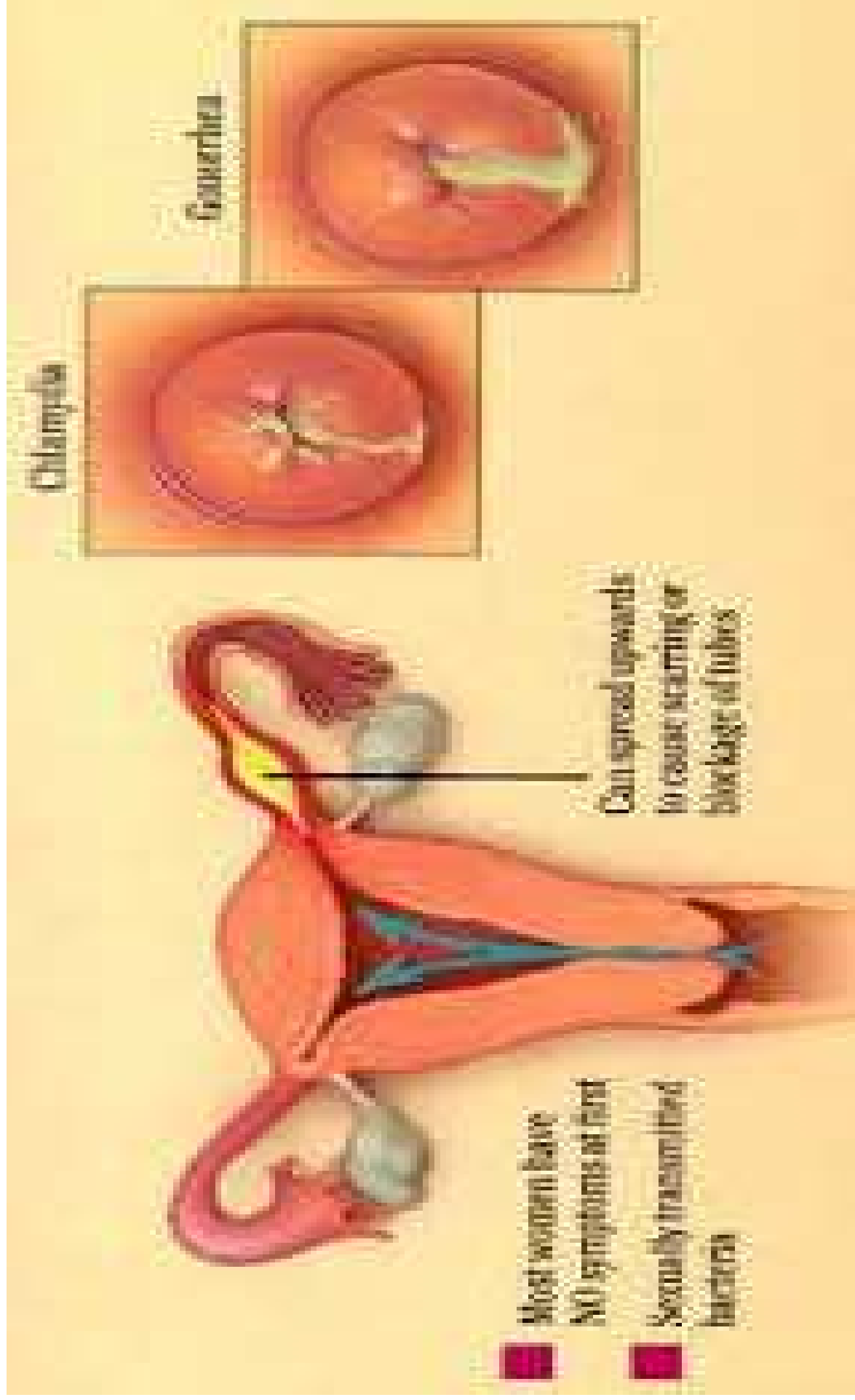
chlamydia

Complications for Women

- Pelvic Inflammatory Disease (PID): infection of the uterus, ovaries and fallopian tubes.
- Infertility related to upper genital tract infection causing permanent damage to fallopian tubes.
- Cervicitis: inflammation of the cervix.



Chlamydia & Gonorrhea



GENITAL HERPES

Sexually transmitted

Caused by HSV type I(oral) & II(genital)

Virus had latency in sensory ganglion

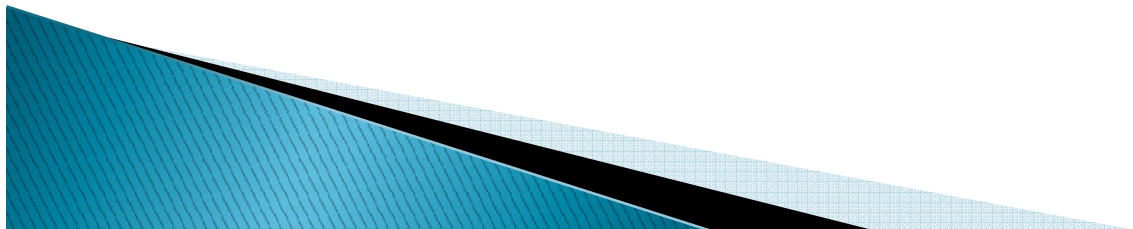
Primary and nonprimary infection

Sign and symptoms

Asymptomatic

Genital pain ,dysuria ,

multiple superficial tender ulcer with
LAP



Diagnosis

PCR for swab from lesion

IgG & IgM for determination of type

Complications

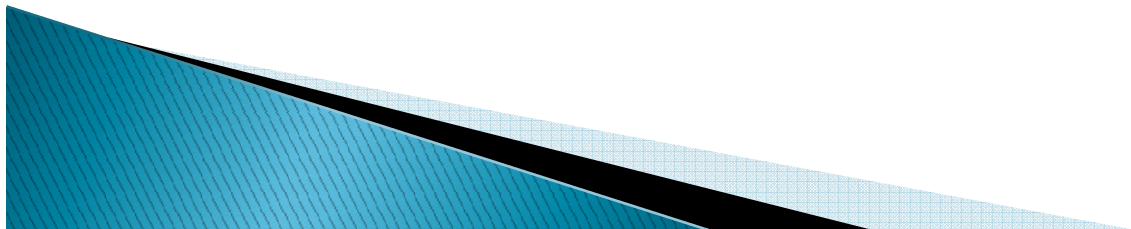
Neonatal herpes during delivery which is more in primary so delivery should be by C/S

Treatment

Aciclovir

Treat contact

Barrier contraception



Genital herpes

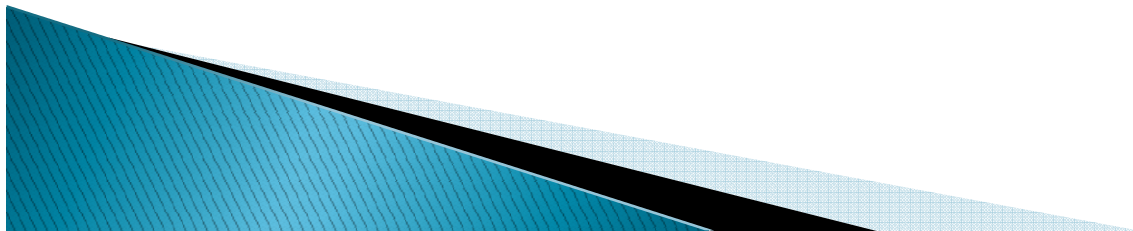


GENITAL WART

Is benign epith tumour
Sexually transmitted

Caused by HPV which of 2 types
Oncogenic 16 & 18 (cervical cancer)
Non oncogenic 6 & 11 (genital wart)

Presentation multiple or single soft non tender
masses -+ itching



Diagnosis clinically ,serotype

Treatment

Local ablation or surgical excision of lesion

Topical therapy

Liquid nitrogen

Topical podophylotoxin

Local imiquinod

Contact screening and screening for ca cervix is necessary in HPV infection

HPV in pregnancy

neonatal papillomatosis very rare so C/S not indicated only if the lesion large enough to obstruct birth canal

Genital wart



SYPHILIS

Sexually and transplacentally and transmitted infection

Caused by T. pallidum

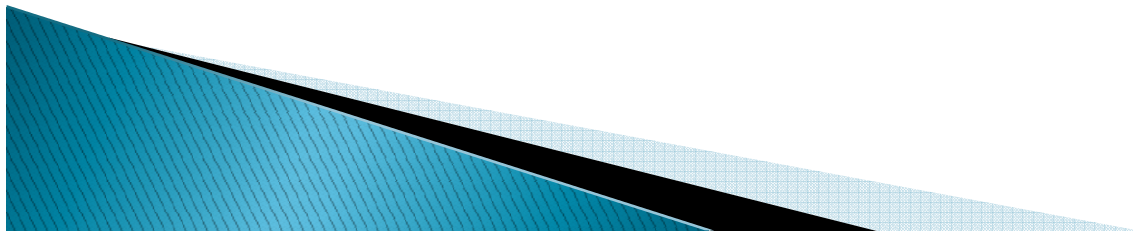
Types (early & late)

Acquired

Early chancre ,codylomata lata ,meningitis

Late Gumma ,cardiovascular ,neurological

Congenital (early & late)



Diagnosis

Dark field microscopy of lesion

Serology or PCR

RPR , VDRL mainly for follow up

RPR mabe -ve in early disease

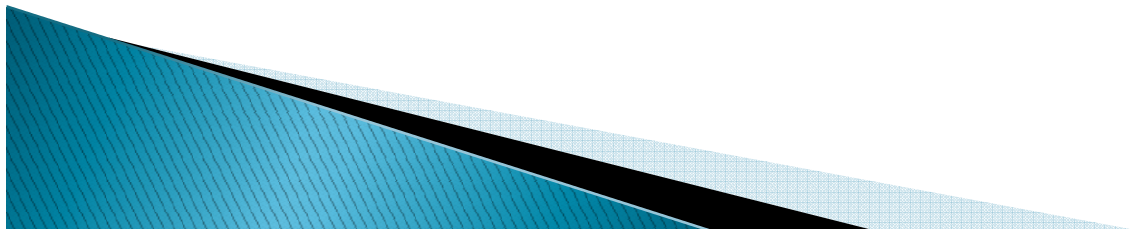
VDRL false +ve in pregnancy ,diabetes ,
rheumatoid arthritis

TPHA should be repeated 4-6 week

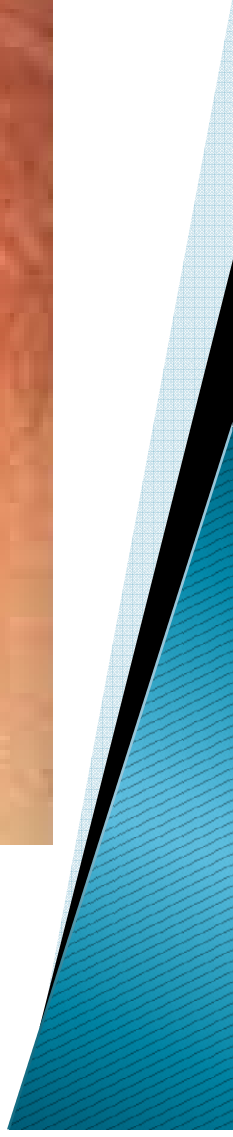
Treatment

pencillin (depot preparation)

Treat partner



Primary syphilis (chancere)



Codylomata lata



Gumma of syphilis



LATE CONGENITAL SYPHILIS

- **Hutchinson's triad**
 - Hutchinson's teeth
 - Interstitial keratitis
 - 8th nerve deafness
- **Other manifestations**
 - Saddle nose
 - Frontal bossing
 - Cluttons joint (painless swelling of joint)



Congenital syphilis



HIV

Sexually transmitted

Caused by retrovirus cause progressive depletion of CD4 lymphocyte

Presentation variable

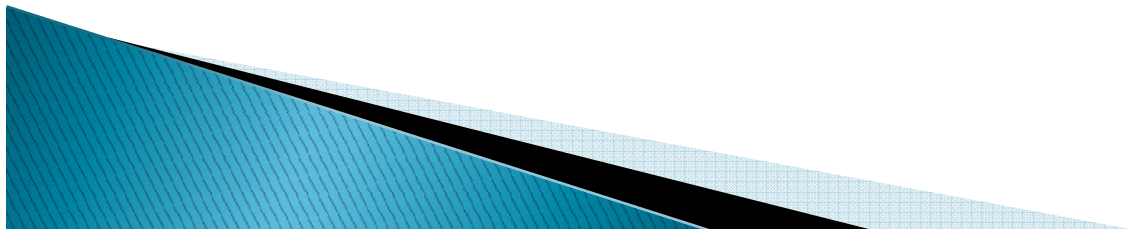
Treatment HAART

Gynecological and obstetrical concern

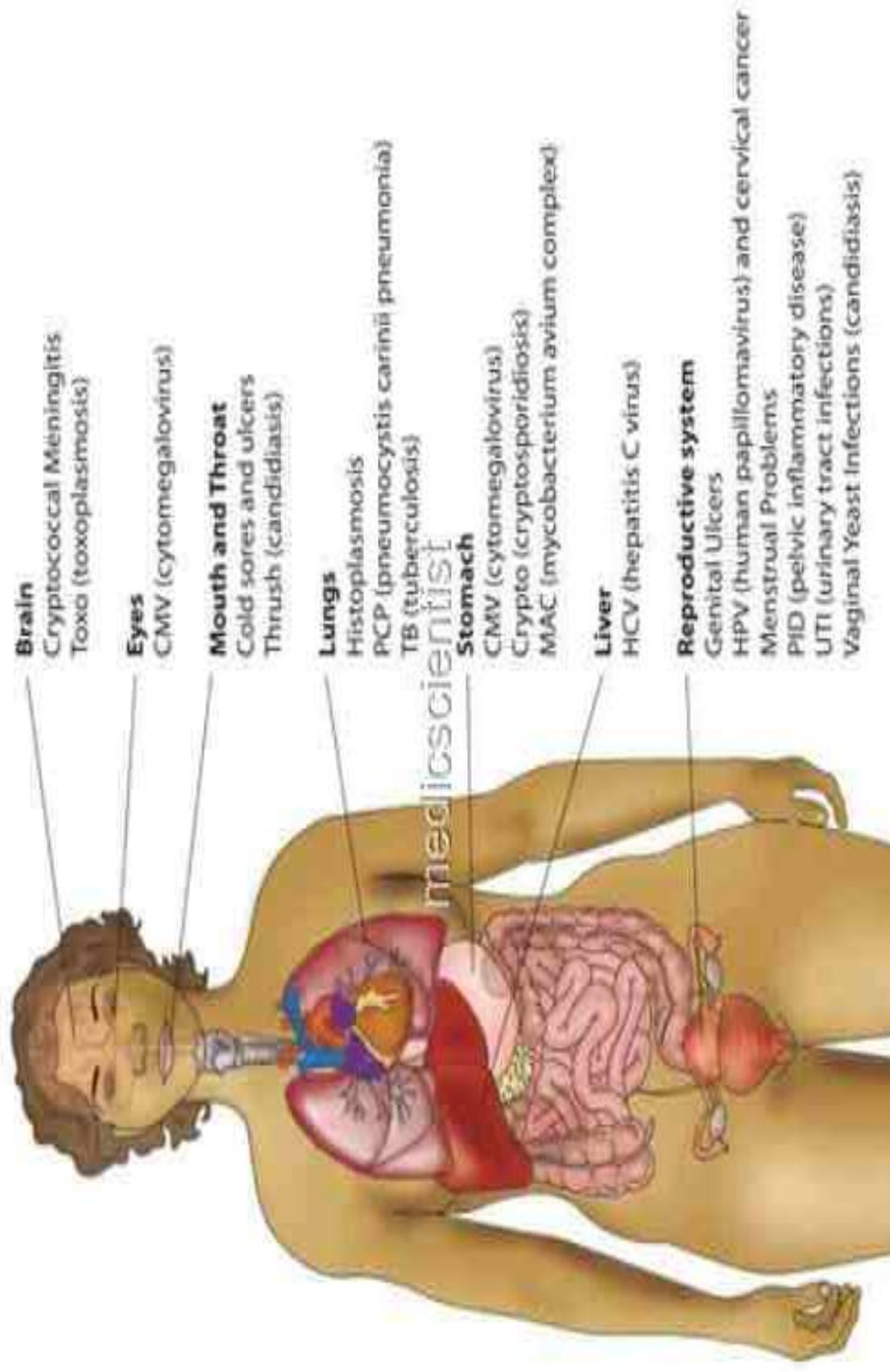
–associated with other STI

Associated with cervical ,vaginal and vulval cancer

HAART reduce efficacy of hormonal contraception



Acquired immunodeficiency disease



HIV

Diagnosis of HIV/AIDS

- Clinical criteria
 - WHO and CDC criteria
- Laboratory Techniques
 - Isolation of the virus in culture
 - Detection of viral antigens e.g. p24 ag
 - Detection of viral nucleic acid by polymerase chain reaction (PCR)
 - Detection of specific antibody to HIV antigens

Pregnancy and HIV

Virus transmitted during labour and breast feeding

Route of delivery better by C/S

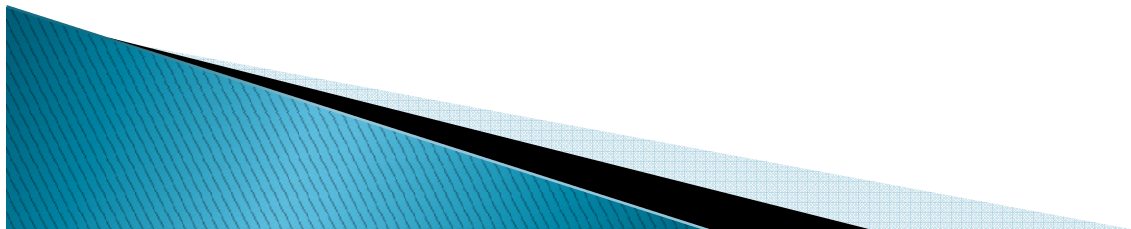
Transmission increased with PROM and fetal blood sampling

Complications

miscarriage

preterm labour

congenital infection



Thank you

