Sexual Health 101

Lemmese AlWatban
MBBS, CCFP, MClSc
Assistant Professor in the Family Medicine Department
Consultant Women's Health and Sexual Health

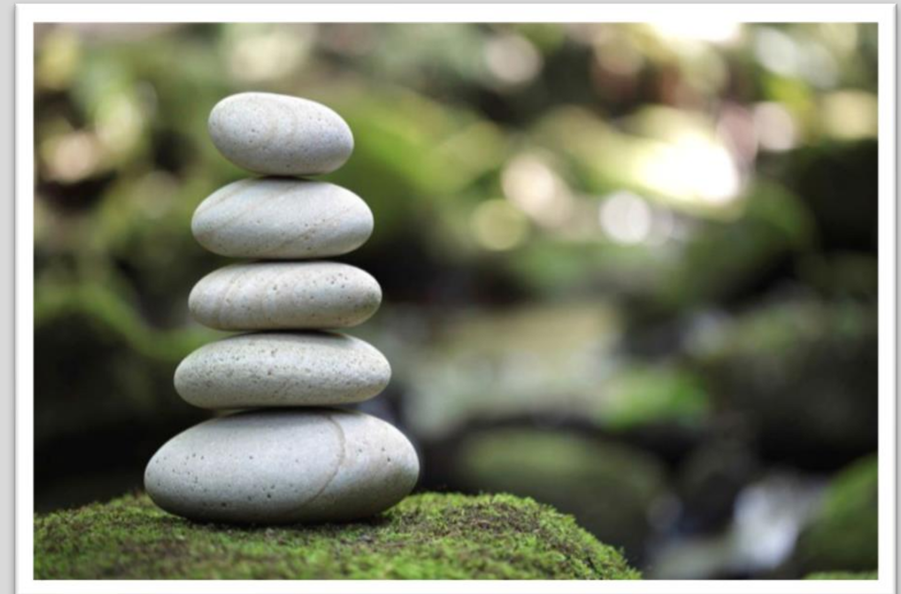
Objectives

- Taking a sexual history
- Types of sexual dysfunctions in males and females
- Sexually transmitted infections (STI) overview:
  - Bacterial
  - Viral
  - Parasite

Sexuality

- (WHO): Sexual health is a state of physical, mental and social well-being in relation to sexuality.

- Sexuality involves biological, psychological, sociological and spiritual variables.



Why ask patients about “Sex”?

1. Morbidity and mortality—STIs and HIV/AIDS
2. Symptoms of illness
3. Treatment side effects
4. Past may explain present problems
5. Dysfunctions and difficulties are common
6. Association with health and happiness
7. Why not?

Why 'Sex' Questions Are Not Asked

1**. Unclear what to do with the answers**
2. Fear of offending patient
3. Lack of obvious justification
4. Generational obstacles
5. Fear of sexual misconduct charge
6. Sometimes perceived irrelevant
7. Unfamiliarity with some sexual practices

When Should Questions Be Asked?

‘The earlier the better’

Delay in approaching the topic communicates discomfort.

When ?

- HPI
- Review of Systems
- Personal and Social History

What would you ask to screen?

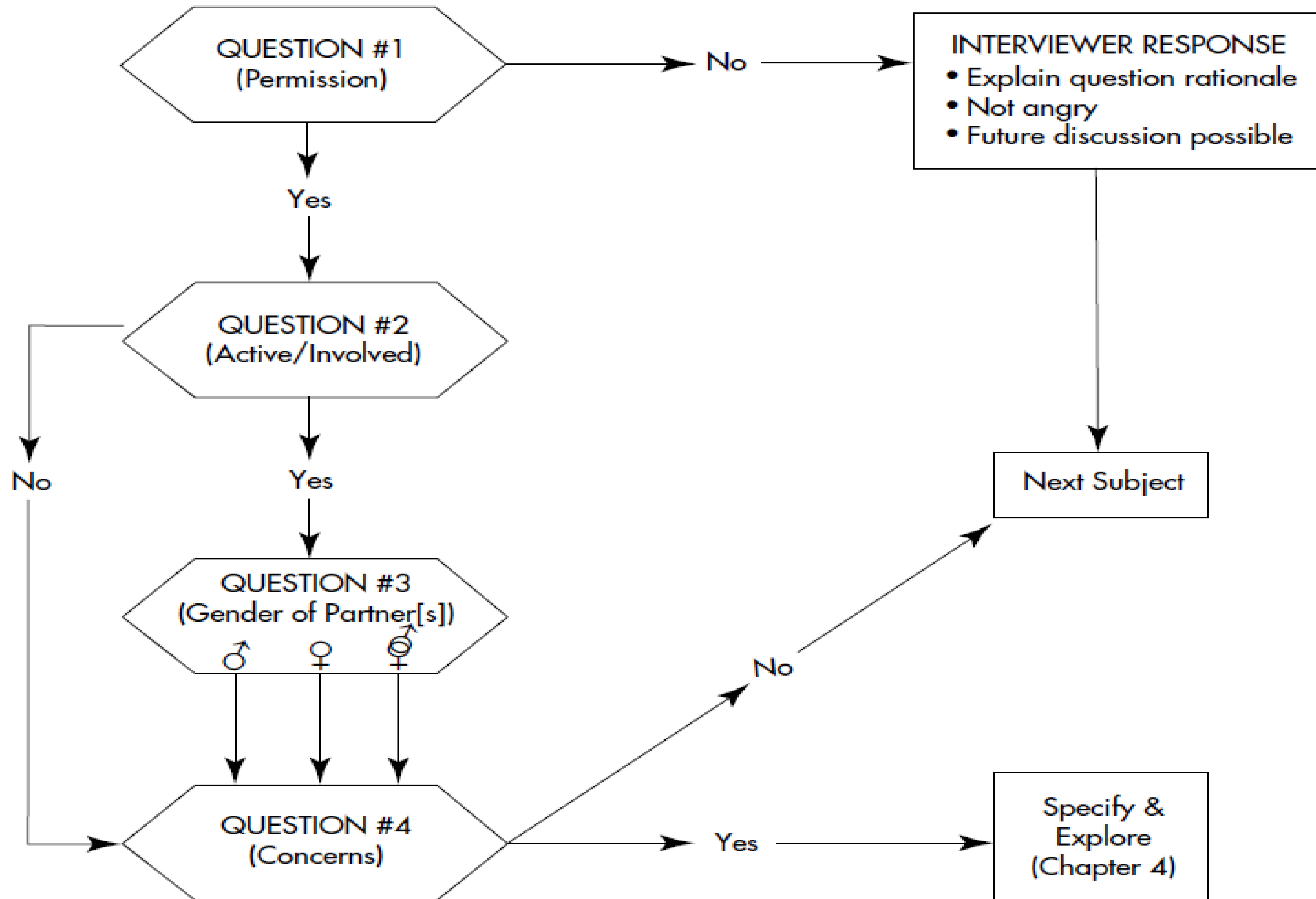
1. Can I ask you a few questions about sexual matters?

2. <u>Are you sexually active</u>? (last 6 months)

3. With women? men? both? (depends on context)

4. <u>Do you *or your partner* have any sexual concerns</u>? (or with the addition of examples)

Sex-Screening Formats



What is a sexual History

sexual histories v.s sexual history

Depends on:

- the patient
- the problem presented
- the amount of time available for questioning
- the context in which the patient is seen

Interviewing Versus History-taking

how to ask questions (interviewing) is quite different from *what to ask (history-taking)*

techniques of inquiry may affect the quality and the quantity of the information gathered

*Interviewing Methods

1. Ask patient’s permission
2. Interviewer takes initiative
3. Language: medical/technical versus slang
4. Statement/Question technique
5. Privacy and Confidentiality
6. Delay sensitive questions
7. Display nonjudgmental attitude
8. Provide explanation
9. Discuss feelings
10. Promote optimistic attitude

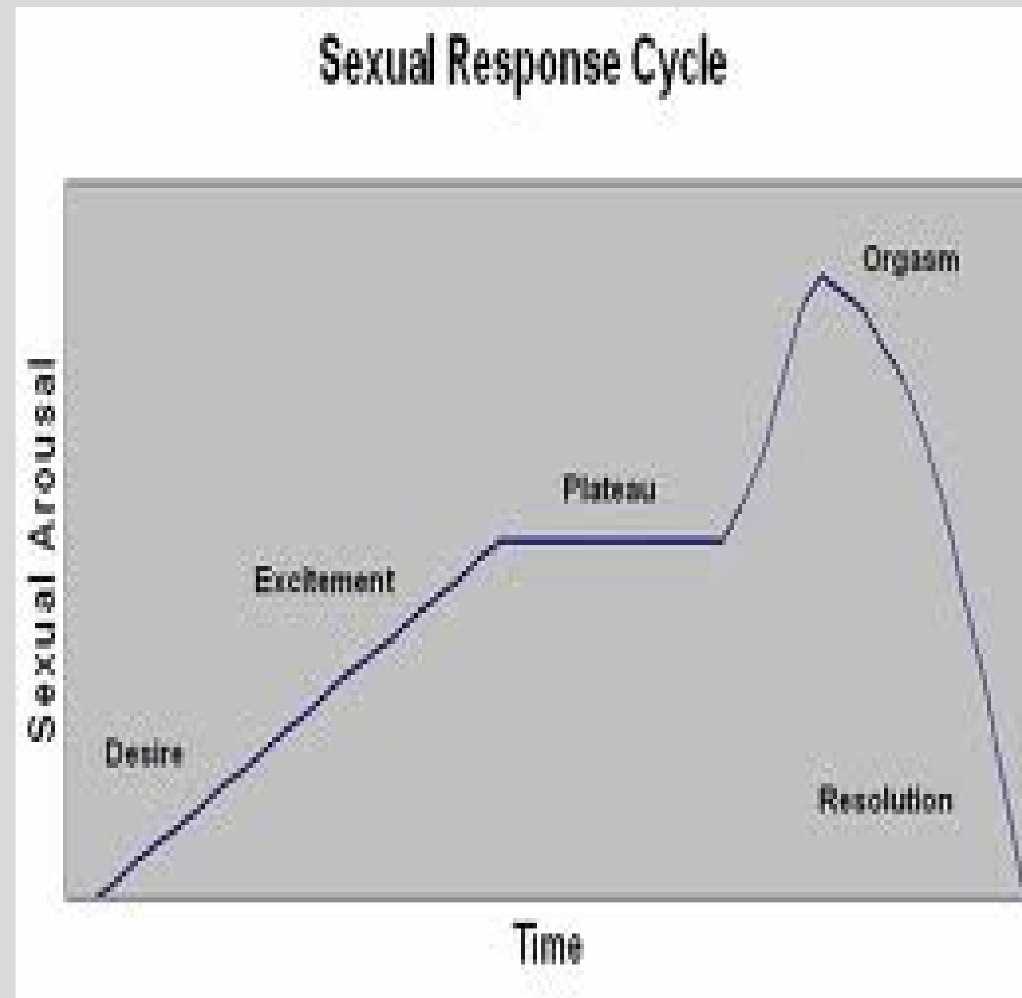
- from Maurice WL. Sexual medicine in primary care. Toronto: Mosby;1999:41.50

Optimism

patients tend to think of themselves as not simply having a sexual problem; they also think they are less of a man or woman in the process

Hope is one of the most powerful treatment factors

Normal sexual cycle male and female



Ask about :

- Desire
- Arousal
- Orgasm
- Pain
- Sx of infection (Discharge/ spotting..etc)

- Stressors

- Age, job, martial status, (1st?)
- children (ages) ,
- Gyn/OB hx
- PMHx and Pψhx
- PSHx
- Meds/ contraception /hormones
- Drugs / Herbs
- Partner hx (age, job, 1st? PHX, meds..etc)

* PATTERN OF SEXUAL DYSFUNCTION

- 1. DURATION : lifelong or acquired
- 2. CIRCUMSTANCES : generalization or situational
- 3. DESCRIPTION (compare to pt previous, scale useful)
- 4. PATIENT’S SEX RESPONSE CYCLE (+pain)
- 5. PARTNER’S SEX RESPONSE CYCLE (direct v.s indirect)
- 6. PATIENT AND PARTNER’S REACTION
- 7. MOTIVATION FOR TREATMENT (not CC)

Dx

The American Psychiatric Association (APA) require that a sexual problem be recurrent or persistent and cause personal distress or interpersonal difficulty

Female sexual dysfunctions

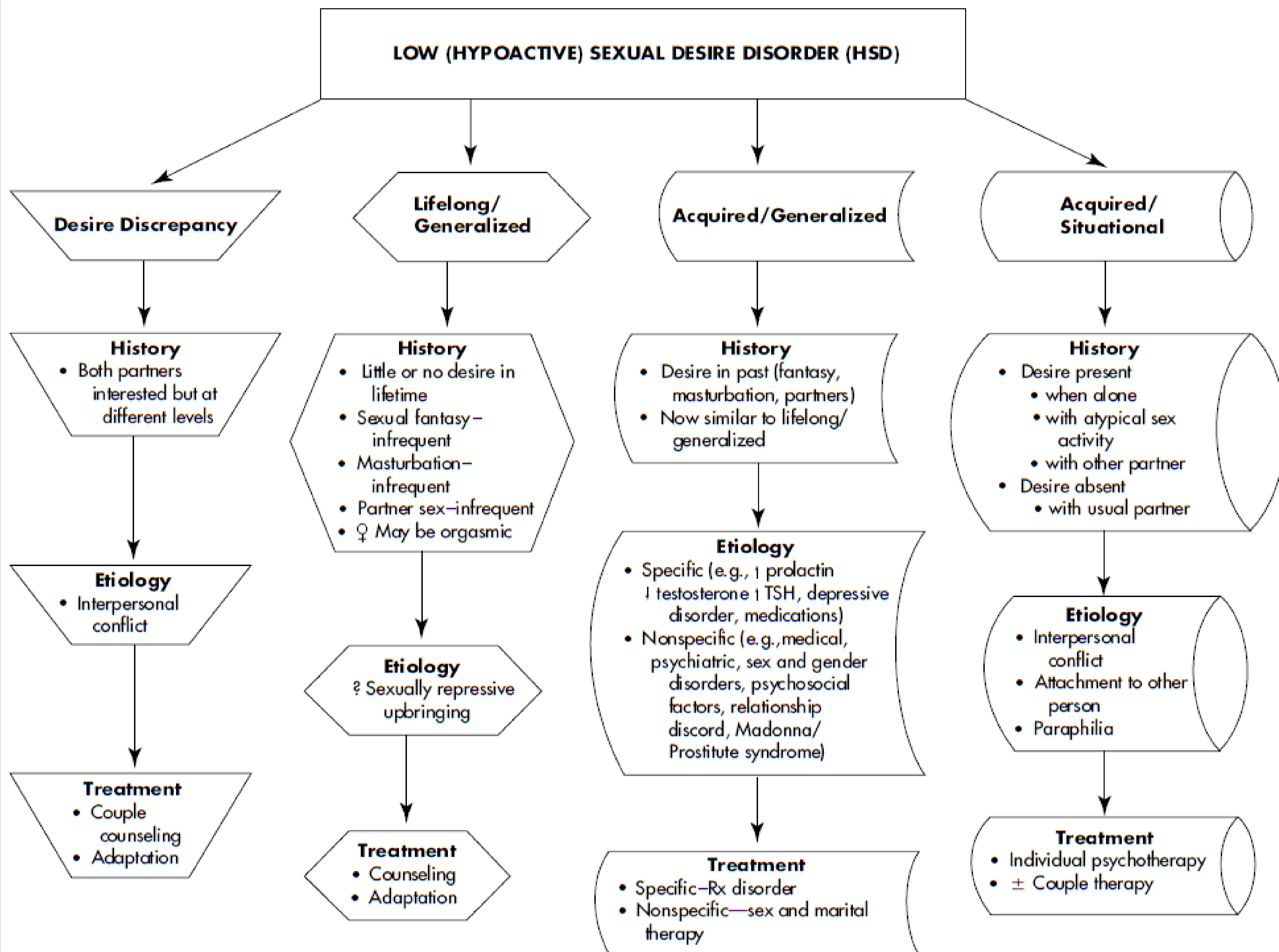
- **Sexual interest/ arousal disorder** - absent or reduced:
  - interest , thoughts / fantasies , reduced or no initiation of sexual activity
  - excitement / pleasure to sexual activity
  - Sexual interest/arousal in response to sexual cues (internal or external , written , verbal , visual)
  - Genital or non-genital sensations during sexual activity

- **Orgasmic disorder** - Persistent or recurrent reduced intensity, delay in, or absence of, orgasm following a normal sexual excitement phase

- **Genito-Pelvic Pain /Penetration Disorder** - Recurrent or persistent difficulty with one or more :
  - Vaginal penetration during intercourse
  - Pain with intercourse or penetration attempts
  - Fear or anxiety about pain in anticipation of penetration
  - Tensing or tightening of pelvic floor muscles

Male sexual dysfunctions

- **Hypoactive Sexual Desire Disorder** – deficient or absent sexual/erotic thoughts or fantasies and desire for sexual activity
- **Erectile Disorder** – difficulty obtaining, maintaining or decreased rigidity
- **Premature Ejaculation** – occurring during partnered sexual activity with in 1min following penetration and before the individual wishes
- **Delayed Ejaculation** – marked delay , infrequency or absence of ejaculation



LOW (HYPOACTIVE) SEXUAL DESIRE DISORDER (HSD)
Desire Discrepancy
Lifelong/ Generalized
Acquired/Generalized
Acquired/ Situational
History
• Both partners interested but at different levels
Etiology
• Interpersonal conflict
Treatment
• Couple counseling
• Adaptation
History
• Little or no desire in lifetime
• Sexual fantasy–infrequent
• Masturbation–infrequent
• Partner sex–infrequent
• ♀ May be orgasmic
Etiology
? Sexually repressive upbringing
Treatment
• Counseling
• Adaptation
History
• Desire in past (fantasy, masturbation, partners)
• Now similar to lifelong/ generalized
Etiology
• Specific (e.g., ↑ prolactin ↓ testosterone ↑ TSH, depressive disorder, medications)
• Nonspecific (e.g.,medical, psychiatric, sex and gender disorders, psychosocial factors, relationship discord, Madonna/ Prostitute syndrome)
Treatment
• Specific–Rx disorder
• Nonspecific—sex and marital therapy
History
• Desire present
• when alone
• with atypical sex activity
• with other partner
• Desire absent
• with usual partner
Etiology
• Interpersonal conflict
• Attachment to other person
• Paraphilia
Treatment
• Individual psychotherapy
• ± Couple therapy

Sexually Transmitted Infection (STI)

Sexually Transmitted Infections (STI)

- More than 30 bacteria, viruses and parasites are known to be transmitted through sexual contact.
- 8 of these pathogens are linked to the greatest incidence of sexually transmitted disease.
  - 4 are currently curable:

    syphilis, gonorrhoea, chlamydia and trichomoniasis.

  - 4 are incurable:

    (viral) hepatitis B, herpes simplex virus (HSV or herpes), HIV, and human papillomavirus (HPV).

Spread

- STIs are spread predominantly by sexual contact, including vaginal, anal and oral sex.
- Some STIs can also be spread through non-sexual means such as via blood or blood products or skin to skin contact
- Many can be transmitted from mother to child during pregnancy and childbirth.
  - Eg: chlamydia, gonorrhoea, hepatitis B, HIV, HSV and syphilis
  - What dosnt transmit can also cause complications

WHO - statistics

- More than 1 million sexually transmitted infections (STIs) are acquired every day worldwide.
- Each year, there are an estimated 357 million new infections with 1 of 4 STIs: chlamydia, gonorrhoea, syphilis and trichomoniasis.
- More than 500 million people are estimated to have genital infection with herpes simplex virus (HSV).

Sexually transmitted infections in Saudi Arabia

Tariq A Madani (1995-1999)

Results: A total of 39049 STIs were reported to the Ministry of Health. **Reported STIs included nongonococcal urethritis (14557 infections, 37.3%), trichomoniasis (10967 infections, 28.1%),**
gonococcal urethritis (5547 infections, 14.2%), syphilis (3385 infections, 8.7%), human
immunodeficiency virus (2917 infections, 7.5%), genital warts (1382, 3.5%), genital herpes (216 infections, 0.6%), and chancroid (78 infections, 0.2%). The average annual incidence of STIs per100,000 population for Saudis and non-Saudis, respectively, was as follows: 14.8 and 7.5 for
nongonococcal urethritis, 9.4 and 10.4 for trichomoniasis, 5.2 and 4.2 for gonorrhea, 1.7 and 6.4 for syphilis, 0.6 and 8.0 for HIV, 1.4 and 0.7 for genital warts, 0.1 and 0.4 for genital herpes, and 0.1 and 0.1 for chancroid. The incidence of STIs was somewhat steady over the surveillance period except for nongonococcal urethritis which gradually increased

Sexually Transmitted Diseases in Domestic Expatriate Workers in Jeddah, Saudi Arabia

Sami A. Hamdi, MBBCH, MSc, MD; M. Abdulbari Ibrahim, MD, MPH&TM, DrPh (1997)

During routine pre-employment screening. The relative frequencies for syphilis and HIV were 23.8% and 19% respectively

Prevalence and Awareness of Sexually Transmitted Infections among Inmates of a Drug Rehabilitation Center in Saudi Arabia: A Cross-Sectional Study

Wafa Fageeh*, etal

Results:

Of the total 115 participants, 18 had one or more STIs, including syphilis (n=11), HIV (n=5), HBV (n=5) and combined HBV and syphilis (n=3). The prevalence of STIs was higher among injecting drug users than among noninjecting drug users. Compared to the group that did not have STIs, very few participants who were positive for STIs were aware that condoms provided protection against STIs.

Sexually Transmitted Infection (STI)

- Up to 90% of sexually transmitted infections are asymptomatic
- A person can have and spread an STI and not know it
- Complications of untreated sexually transmitted infections (STIs) include upper genital tract infections, infertility, chronic pelvic pain, cervical cancer, and chronic infection with hepatitis viruses and HIV

Screening !!

Who’s at risk?

Behavioral Factors	Risk groups
• New sex partner in past 60 days • Multiple sex partners or partner with multiple • Hx of STI or PID or sex partner • No use of protection • Engaging in unsafe sexual practices	• Young age (15 to 24 years old) • Men who have sex with men (MSM) • History of domestic violence • HIV-positive status • Pregnant women • Admission to correctional facility or juvenile detention center • Drug use

STI risk screen

History:

- Genital symptoms associated with STIs (discharge, dysuria, abdominal pain, testicular pain, rashes, lesions).
- Systemic symptoms associated with STIs (fever, weight loss, lymphadenopathy).
- Personal risk factors and prevention (condom use, vaccinations).
- Patient’s knowledge of increased risk of STIs.
- Have you ever had STI or been treated for one? Do you Have any concerns about STI?

Aim to quickly identify or rule out major risk factors associated with increased risk of STIs

- Are you sexually active now, or have you been sexually active? This includes oral sex or anal sex, not just vaginal sex
- Do you have any symptoms that might make you think that you have an STI? (Do you have any sores on or around your genitals? Does it hurt or burn when you pee? Have you noticed an unusual discharge from your penis, vagina or anus? Do you have pain during sex?)
- What are you doing to avoid pregnancy? (Do you or your partner use any type of birth control?)
- What are you doing to avoid STIs including HIV?
- Do you have any concerns about sexual or relationship violence or abuse?
- Have you or your partner(s) used injection or other drugs?

For women also ask:

- “When was your last menstrual period?
- When was your last Pap test?

There are 3 types of STIs?

Bacterial

- Syphilis
- Chlamydia
- Gonorrhea
- Chancroid
- Lymphogranuloma Venereum (LGV)

viral

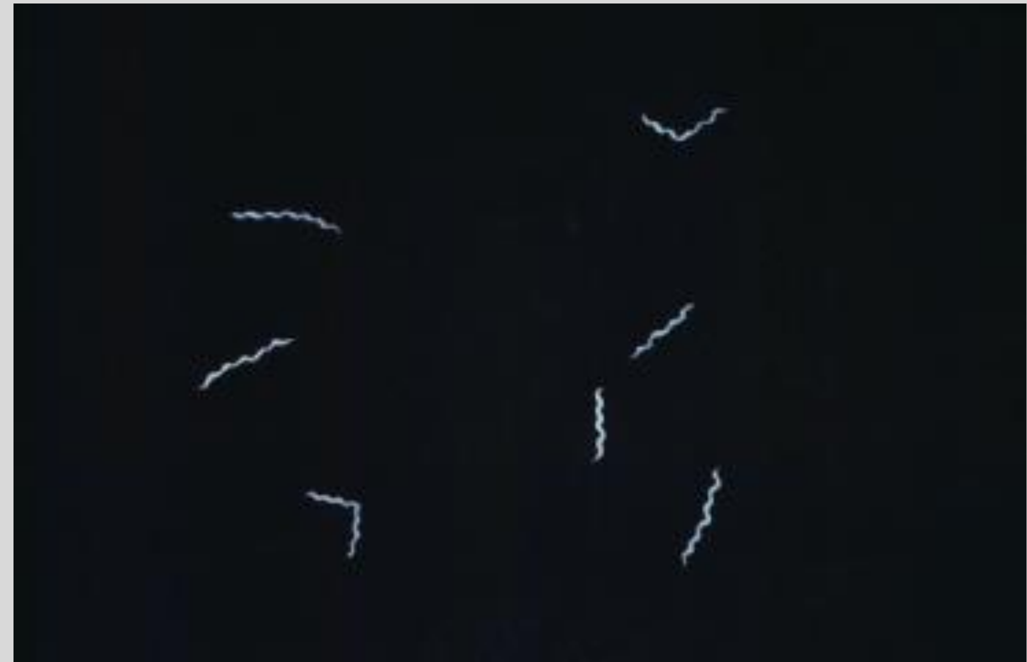
- Herpes
- HPV (warts)
- HIV
- Hepatitis B
- ZIKV ?

Parasitic

- Trichomonas vaginalis
- Lice
- Scabies

Syphilis

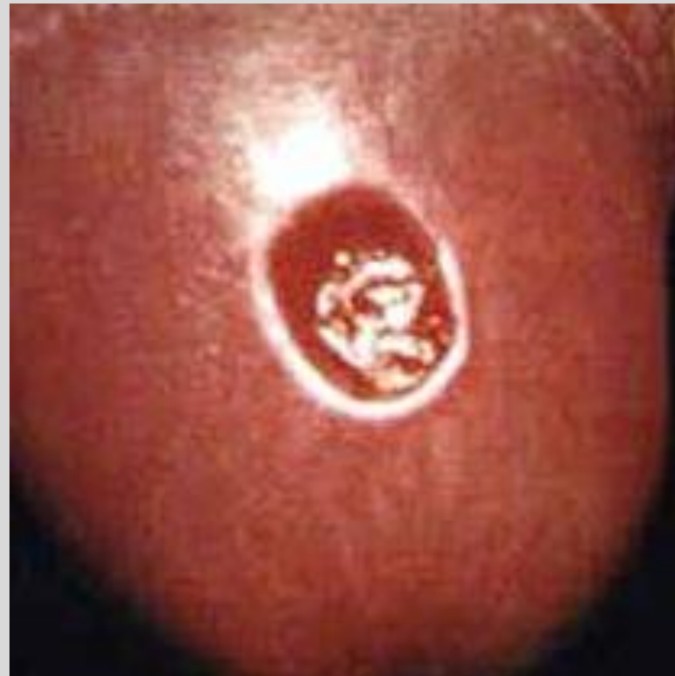
- Syphilis is caused by *Treponema pallidum*.

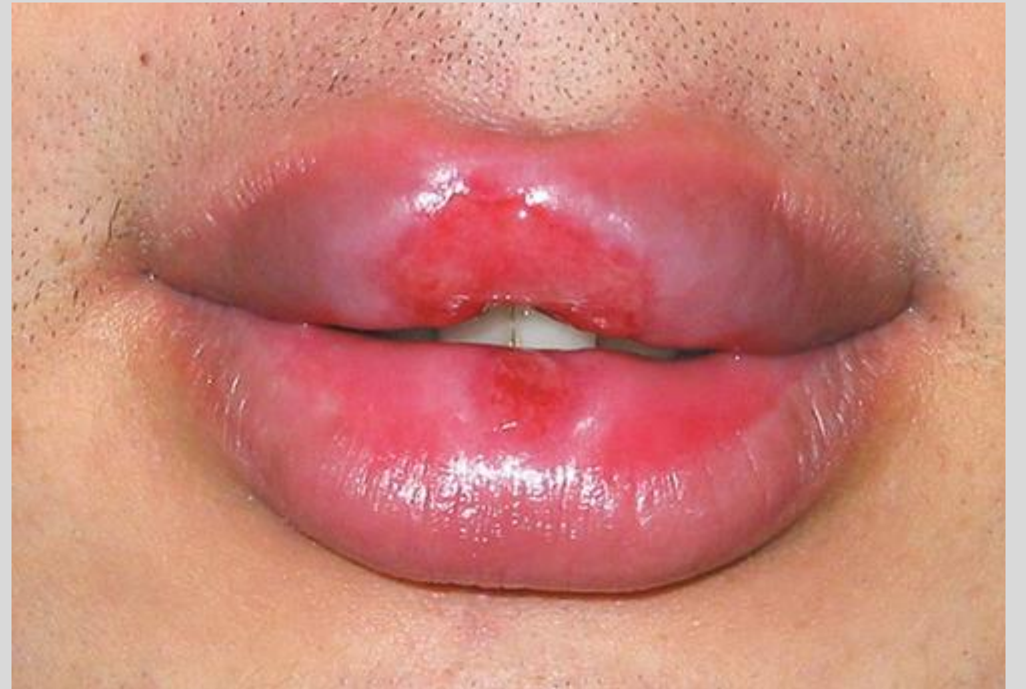


Stage	Clinical manifestations	Incubation period
Primary (local)	Chancre, regional LN	3 weeks (3-90 days)
Secondary (blood spread)	Rash, fever, malaise, lymphadenopathy, mucus lesions, condyloma lata, patchy or diffuse alopecia, meningitis, headaches, uveitis, retinitis	2-12 weeks (2 weeks 6 months)
Latent (suppressed)	Asymptomatic	Early: <1 year Late: ≥1 year
Tertiary (untreated late stage)		
Cardiovascular Syphilis	Aortic aneurysm, aortic regurgitation, coronary artery ostial stenosis	10-30 years
Neurosyphilis	Ranges from asymptomatic to symptomatic with headaches, vertigo, personality changes, dementia, ataxia, presence of Argyll Robertson pupil	At any time
Gumma	Tissue destruction of any organ; manifestations depend on site involved	1-46 years (most cases 15 years)

Symptoms and signs

- Current or past history of lesions or rash
- A high proportion of individuals fail to recall a primary chancre
- Symptoms and signs may be modified in the presence of HIV co-infection





Lab tests:

- Darkfield microscopy – no longer (Serology !)

Non-treponemal	**Treponemal-specific**
Non specific (false positive)	Specific
Can be quantified Reported in titer (good for FU)	Qualitative only /reported as "reactive" or "nonreactive“ (Life long)
• Rapid plasma reagin (RPR) • Venereal Disease Research Laboratory (VDRL) • Toluidine Red Unheated Serum Test (TRUST)	• Fluorescent treponemal antibody absorption (FTA-ABS) • Microhemagglutination test for antibodies to *T. pallidum* (MHA-TP) • *T. pallidum* particle agglutination assay (TPPA) • *T. pallidum* enzyme immunoassay (TP-EIA) • Chemiluminescence immunoassay (CIA)

Treatment

Penicillin G

If allergic (Doxycycline /Cefriaxone)

Duration and dose depends on stage

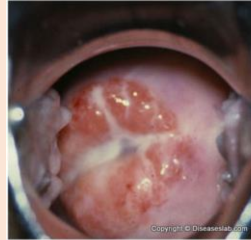
All sexual contacts of infectious syphilis must be located, tested and treated.

Serial serology Follow up

Chlamydia and Gonorrhea

Infections with *Chlamydia trachomatis* and *Neisseria gonorrhoeae* are very common.

In the United States, they are the two most commonly reported communicable diseases.

Females	Males
Symptoms and signs	
•Most often asymptomatic •Cervicitis •Vaginal discharge •Dysuria •Lower abdominal pain •Abnormal vaginal bleeding •Dyspareunia •Conjunctivitis •Proctitis (commonly asymptomatic) 	•Often asymptomatic •Urethral discharge •Urethritis •Urethral itch •Dysuria •Testicular pain •Conjunctivitis •Proctitis (commonly asymptomatic)
Major sequelae	
•Pelvic inflammatory disease •Ectopic pregnancy •Infertility •Chronic pelvic pain •Reactive Arthitis	•Epididymo-orchitis •Reactive Arthritis

Lab test:

Nucleic acid amplification testing (NAAT)

- vaginal swabs for women
- first-catch urine for men
- NAAT can also be performed on endocervical (for women) and urethral swab (for men)
- Self collected vaginal or urine (compliance)

Treatment

- Empirical co-treatment when a diagnosis of N. gonorrhoeae is made without waiting for test results of C. trachomatis due to the significant probability of co-infection (20–42%)

- All partners who have had sexual contact with the index case within 60 days prior should be tested and empirically treated regardless of clinical findings and without waiting for test

Treatment

Gonorrhea

- Preferred:

  Cefixime 800 mg PO as a single dose + azithromycin 1g PO as a single dose

- Alternate

  ceftriaxone 250 mg IM as a single dose + azithromycin 1 g PO as a single dose

Chlamydia

- Preferred:

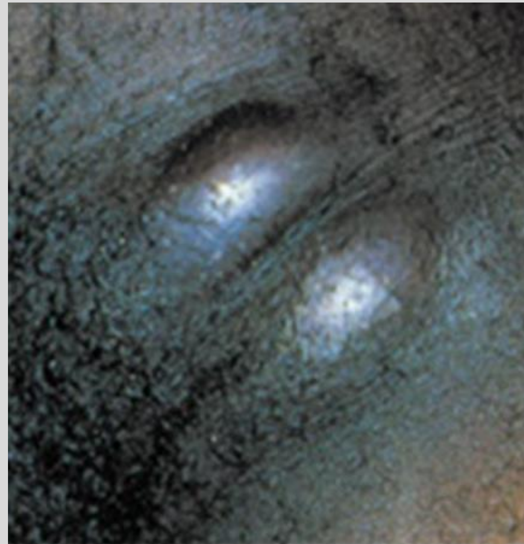
  Azithromycin 1 g PO as a single dose

- Alternate:

  Doxycycline 100 mg PO BID for 7 days

Lymphogranuloma Venereum (LGV)

- Unlike other Chlamydia infection LGV strains are more invasive, affecting the lymph tissue
- Early Painless papule at site of inoculation that may ulcerate.
- 2” lymphadenopathy (groove sign) , 3” possible Destruction of genitalia

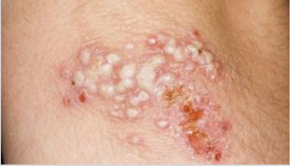


Genital Herpes Simplex (HSV)

- Herpes simplex virus (HSV) types 1 and 2
- Most cases of recurrent genital herpes are caused by HSV-2
- mean recurrence rates in persons with genital HSV-2 (4%) infection than in those with HSV-1 (1%)
- The incidence and prevalence of HSV-1 genital infection is increasing globally
- HSV-1 accounts for 20% of cases, HSV-2 for 80%.(Germany)
- It is estimated that the majority of genital herpes infections are transmitted by persons unaware that they have the infection, or are asymptomatic when transmission occur

Presentation

A diagnostic lesion is a cluster of vesicles on an erythematous background



- Primary infection:
- Systemic sx (67 percent)
- Local pain and itching (98 percent)
- Dysuria (63 percent)
- Tender lymphadenopathy (80 percent)

- Recurrence:
- Typical lesioons, less severe than primary or infections.
- duration of lesions is shorter (10 versus 19 days)
- Systemic symptoms in 5-12%.
- Prodromal symptoms in 43-53%, for an average of 1.2-1.5 days.

Lab tests:

- Culture is sensitive (70% from ulcers, 94% from vesicles) and permits identification of HSV type
- PCR is four times more sensitive than HSV culture and is 100% specific

Management

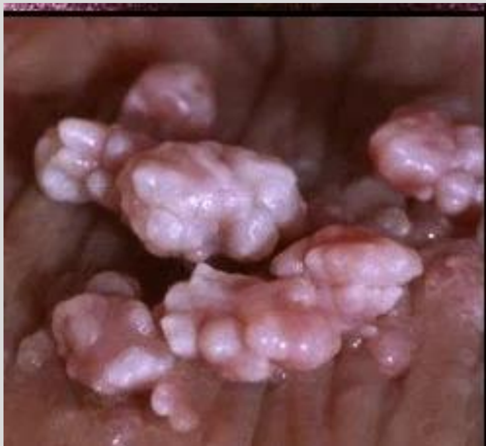
- Counselling is an important component in management. Genital HSV infection is not curable
- Transmission of genital herpes is decreased by the following:
- Avoidance of contacts with lesions during obvious periods of viral shedding (prodrome to re-epithelialization) from lesions.
- Condom use (50%)
- suppressive antiviral therapy, which reduces recurrent lesions, asymptomatic viral shedding and transmission.

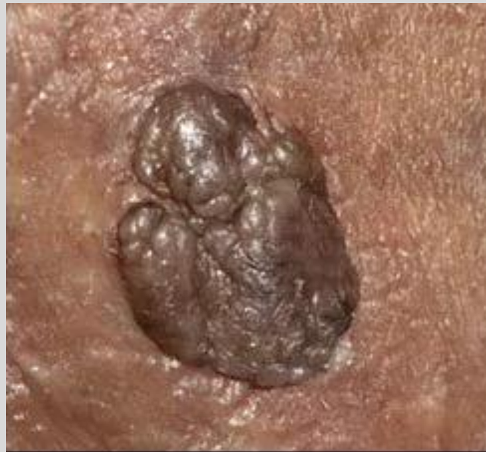
Management options (Antiviral therapy)

No-Treatment	Episodic therapy	Suppressive therapy
• when recurrences are both mild and infrequent • in cases where sexual transmission is not a concern	• for patients with infrequent (less than 6-9 outbreaks per year) • treatment should be started as soon as possible (prodromal or within hours of a lesion)	• for patients with more than 9 symptomatic outbreaks a year • in those who are concerned with disease transmission

Human Papilloma Virus (HPV)

- HPV are two types on the basis of their oncogenic potential.
  - Lowrisk varieties, such as HPV6 and HPV11, give rise to condylomata acuminata (genital warts)
  - high-risk varieties, such as HPV16 and HPV18, cause neoplasia.





Burden of HPV related cancers

- Cancer of the cervix the second most common cancer among women worldwide
- Cervical cancer ranks as the 9th leading cause of female cancer in Saudi Arabia

HPV Vaccines

- Bivalent vaccine (Cervarix) (HPV types 16 and 18) - responsible for more than 65% of cervical cancers
- Quadrivalent vaccine (Gardasil) (HPV types 6 ,11 90% warts) +,(16, 18)
- 9-valent vaccine (HPV types 6, 11, 16, 18, 31, 33, 45, 52, and 58) an additional 15% of cervical cancers.
- For girls and boys vaccines be given at 11 to 12 years of age
- not licensed or recommended for persons older than 26 years.

Incidence of cervical cancer

- Saudi Arabia : 1.3
- Western Asia: 3.6
- World Crude incidence:15.8

Annual number of new cancer cases

- SA: 152
- Western Asia: 3931
- World: 529828

What do we do ?

- Interpret guidelines
- Offer information
- Prescribe and administer vaccine if requested

HIV

HIV-positive persons who receive timely and appropriate treatment, with good compliance, now have nearly the same life expectancy as HIVnegative persons

- All patients presenting to a physician for the diagnosis or treatment of a sexually transmitted disease should be tested for HIV.
- HIV testing requires the patient’s consent

- Higher viral load more risk of transmission-- unlikely if the HIV-positive individual has a consistently low viral count (less than 50 copies/mL)

- Receptive partner in unprotected anal intercourse - highest risk

- The risk of HIV transmission is elevated X 3 to 10 by presence of other STI

When to test

- serologic testing is recommended when there is a high index of suspicion
- Persons may also present with specific opportunistic infections or other conditions indicative of underlying immunosuppression

Diagnosis of HIV

ELISA	Screening Antibodies (2-3wks seroconversion)
PCR	• Measures the viral load (acute exposure before seroconversion)
Western Blot	Confirmatory test (after 2 +ve ELISA)

ZIKV

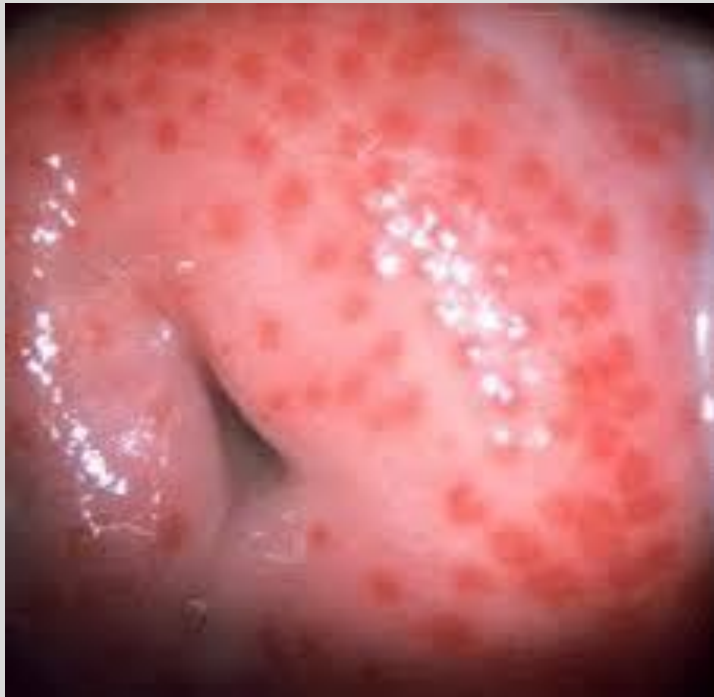
- Zika virus (ZIKV) infection is caused by a flavivirus transmitted through the bite of an infected Aedes mosquito
- ZIKV infection can cause microcephaly, other congenital abnormalities, fetal death
- women planning a pregnancy should wait at least **two months** after their return from an affected area before trying to conceive. For couples where the male partner has returned from an affected area, it is reasonable to delay trying to conceive for **six months**

Trichomonas

- Infection with the flagellated protozoan *Trichomonas vaginalis*.
- Women are affected more often than men
- Men
  - urethritis, epididymitis, or prostatitis
  - mild pruritus or burning in the penis after sexual intercourse
- Women:
  - vaginal discharge diffuse, thin, ill-smelling, yellowish-green
  - Symptoms worse during menstruation, post coital spotting
- 70–85% have minimal or no symptoms
- Untreated asymptomatic infection can persist for months or years

On examination

- Erythema of the vulva and vaginal mucosa , discharge 10-30% of symptomatic women
- Punctate hemorrhages on the cervix (ie, strawberry cervix) in 2%



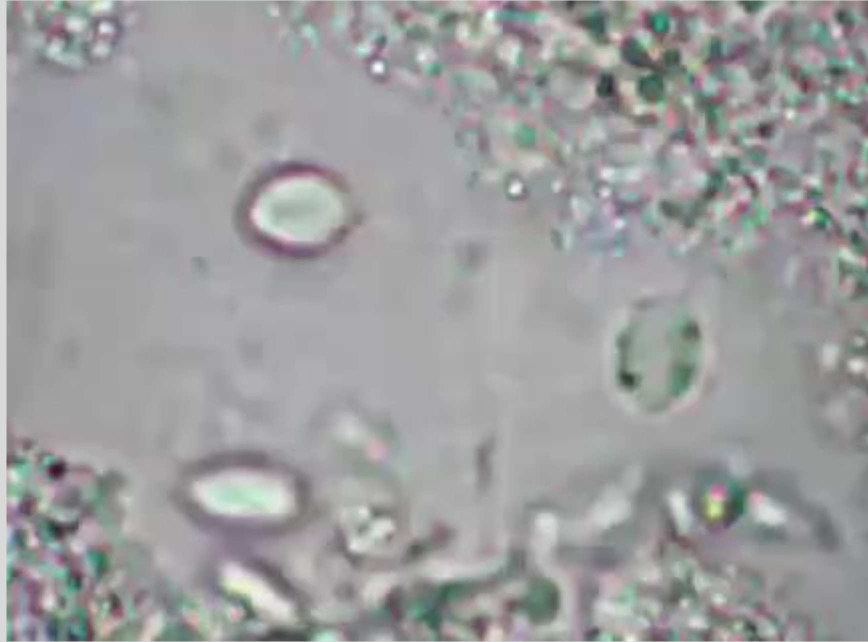
Lab test:

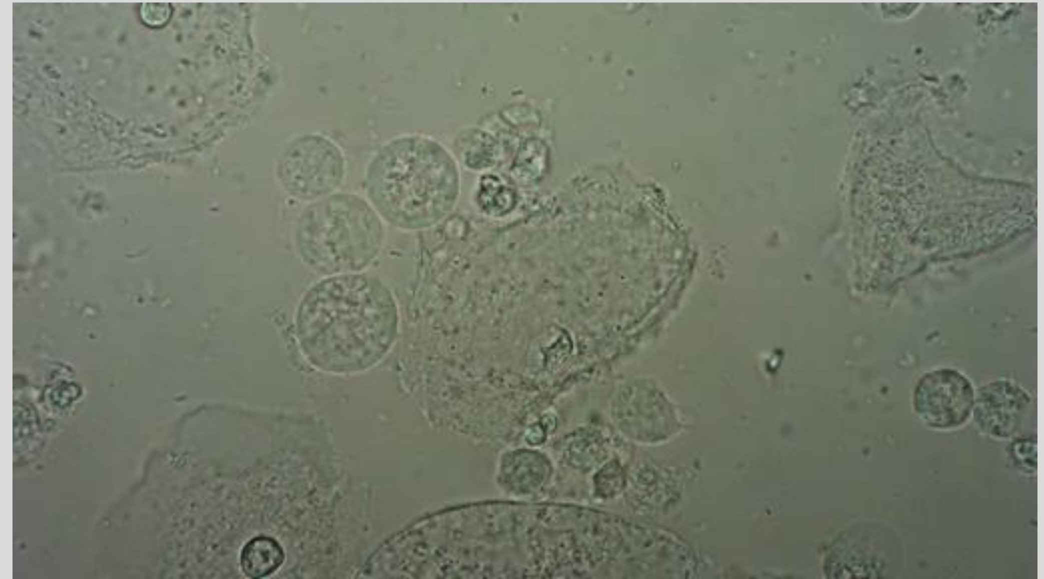
Microscopy is often the first step(positive no need for further testing)

(if negative) ,>>>then nucleic acid amplification tests (NAAT) if not available then >>>rapid diagnostic kits, or culture

organisms remain motile for 10 to 20 minutes after collection of the sample

Microscopy





Treatment

- 5-nitroimidazole drugs (**Metronidazole** or **Tinidazole**) are the only class of drugs that provide curative therapy of trichomoniasis.

- **Allergy** — other ABX cure rates are low (≤50%)

- consider referral for desensitization rather than using an alternative class of drugs

In the End…..

- Asking patients about their sexual health is part of your medical assessment
- Screen patients for sexual issues and STI
- When suspecting risk of STI test for ……….
- Always treat partner/ sexual contacts

Thank you