

Sexually Transmitted Diseases

Dr. Mumux Mirani (MPT Sports)
Asst. Professor
S. R. C. P.

CRABS

GONORRHEA

HEPATITIS B

INTERCOURSE

AIDS

CHLAMYDIA

HERPES

STD

SEX

HIV

SYPHILIS

HEPATITIS A

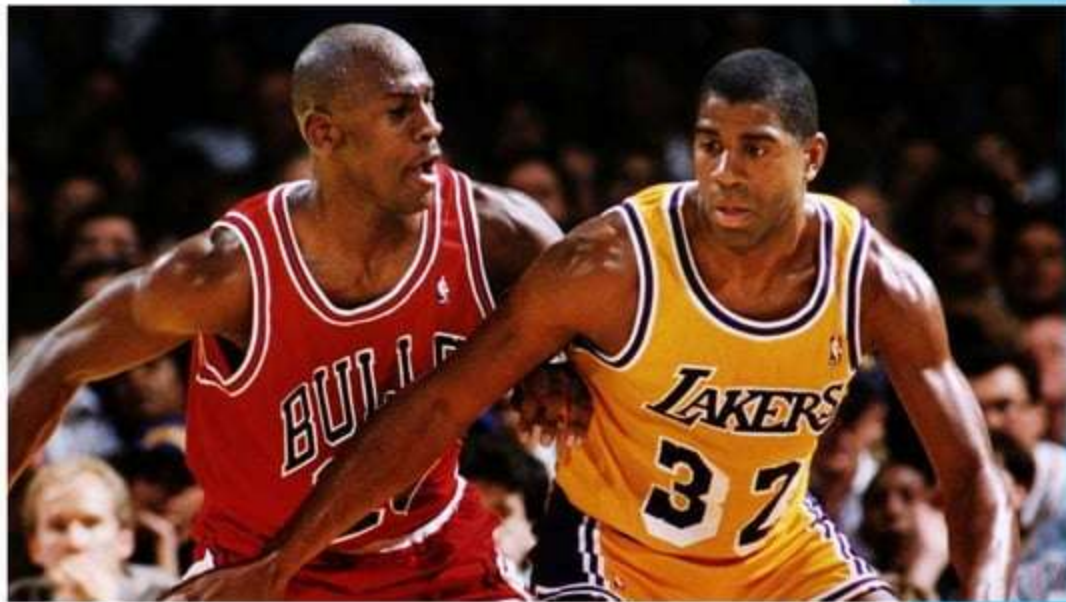
PROTECTION

SHIGELLA

SCABIES

RISK

HEALTH



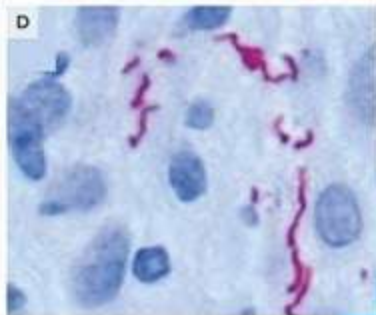
Sexually Transmitted Diseases STDs

The term sexually transmitted disease applies to infection which specifically transmitted by sexual contact.

1- Syphilis:-

- Causative organism: Spirochaete bacterium (*Treponema pallidum*).
- Mode of infection: other than sexual contact is through blood transfusion and from the pregnant mother to her fetus.
- Primary syphilis causes a local (usually genital) pain less ulcer (chancre) which usually heals in 2-6 weeks.
- The inguinal LN are markedly enlarged firm, but not tender.

- Secondary or systemic stage: Occurs 6 weeks to 6 months from exposure. Characterized by: fever, malaise, generalizes skin rash involving the palms and soles, mucosal ulceration, moist wart in the genital and anal area called Condylomata Lata and generalized lymphadenopathy.
- Tertiary syphilis: May affect the nervous or cardio vascular system with progressive destructive lesions or gumata.
- Diagnosis:
 - ✓ Dark examination under microscopy to see the spirochaetes in exudate taken from the chancre or by serological tests which are positive two weeks after infection.
 - ✓ VDRL measures antibodies to treponemal cardiolipin and it is non specific to syphilis.
 - ✓ The definitive diagnosis is by fluorescent treponemal antibody absorption test (FTA-ABS) and the treponema pallidum immobilization test (TPI).
- Treatment:
 - ✓ Procaine penicillin 600.000U/I.M daily for 10 days.
 - ✓ Benzathin penicillin 2.4 million U/I.M.
 - ✓ Erythromycin, Cephalosporin and Tetracycline are an alternative.



2- Acquired Immuno-Deficiency Syndrome:-

- Caused by human immuno-deficiency virus (HIV) which is a retro virus.
- Mode of infection:
 - ✓ Homosexual and heterosexual
 - ✓ Blood and blood product, transfusion
 - ✓ Vertical transmission from mother to her baby in utero or during delivery or during lactation (breast milk).
- HIV attack the cells which has surface specific receptors known as CD4, the chief target cells for this virus are T4 helper lymphocytes. Their depletion leads to profound effect on cellular immunity. The virus also attack macrophage and monocytes.
- The virus makes a DNA copy of the RNA genome (proviral) which integrates in host cell DNA.
- Some patient have symptoms of acute infection (fever, malaise, myalgia, lymphadenopathy, pharyngitis, rash) other do not.

- Chronic infection is largely asymptomatic, but intermittent constitutional symptoms may occur (fever, night sweats, diarrhoea, weight loss). During this period the patient is infective.
- After a latency of 2 to 5 yrs 6-30% of chronic HIV infected patient progress to AIDS.
- AIDS patient present with:-
 - ✓ Tumours (Kaposi sarcoma, non Hodgkin's lymphoma, mouth and ano-rectal squamous carcinoma).
 - ✓ Opportunistic infection with viruses, bacteria, fungi and protozoa (pneumocystis carinii).
- Diagnosis:
 - ✓ ELISA if positive, it should be repeated to decrease the false positive reaction which is about 4:1.
 - ✓ Western blot test must be done for confirmation .
 - ✓ The onset of AIDS may be delayed and the severity reduced by combination of anti-retroviral treatment (zidovudine indinavir) but there is no cure.

3- Hepatitis B:-

- Transmitted by contact with the infected person's contaminated blood, semen, mucus, and saliva.
- First appearance: 6 weeks to 5 months after infection.
- Symptoms: Weakness, loss of appetite, fevers off and on, headaches, muscle pain, dark colored urine, and jaundice. Symptoms are sometimes very mild and may be attributed to something else.
- Test: Blood test
- Treatment: There is no treatment, there is no cure. Supportive therapy with bed rest, fluids, etc. in the initial stages. It is essential that partners be given the hepatitis B vaccine as soon as possible.



A



B

4- Gonorrhoea:-

- Caused by the intracellular gram-negative diplococcus *Neisseria gonorrhoeae*.
- Highly infective, primarily affect, the urethra endocervix, bartholin gland and rectum and commonly ascends to produce acute pelvic inflammatory disease it may also cause monarticular arthritis and aphthalmia neonatorum.
- In the female symptoms are often mild or absent the classical history is urethritis and vaginal discharge.
- Diagnosis: by culture of urethral, endocervical and rectal swabs transported in Stuart's enriched medium and incubated in a carbon dioxide rich environment.
- Treatment: Majority of strains are sensitive to Penicillin. Resistant strains respond to Cephalosprins and Gentamicin.

5- Chlamydia:-

- *Chlamydia trachomatis* is an obligate intracellular organism containing both DNA and RNA and therefore having characteristic of both bacteria and viruses.
- Urogenital infection is caused by subtypes L1, L2, L3.
- Infection cause little symptoms like discharge from vagina and cervix, mild pelvic discomfort or dysuria.
- Infection include trachoma, conjunctivitis, non gonococcal urethritis, non specific cervicitis granuloma venereum.
- Diagnosis:
 - ✓ Tissue culture
 - ✓ Giemsa stain for urethral, cervical or other discharge shows multinucleated cells with intracytoplasmic inclusion bodies.
 - ✓ Antichlamydial antibodies can be detected by the enzyme linked immunosorbent assay (ELISA).
- Treatment: Drug of choice is Doxycycline alternative are Tetracycline or Erythromycin 500mg 1x4x14 days

6- Lymphogranuloma venerum:-

- Caused by chlamydia trachomatis sub type L1, L2, L3.
- Infection starts with small vulval papule which breaks down to form painless ulcer.
- Spread by lymphatics to involve the whole vulva and perineal area, the inguinal glands are enlarged and may form abscesses. There is much sepsis leading to scarring and fibrosis, some times fistula and lymphatic blockage leads to elephantiasis of the vulva.
- Diagnosis: Like chlamydia
- Treatment: Tetracycline or Erythromycin 500 mg 1x4x21 days.

7- Genital Herpes:-

- The DNA virus herpes simplex has two main subtypes 1 and 2 both of which may infect the genital tract the majority of cases being HSV2.
- Primary attack causes tingling and burning sensations in the infected area followed by the appearance of small vesicles on the cervix, vagina or surrounding skin, which break down into multiple small painful ulcers which slowly resolves (10 days) and the virus migrates via sensory nerve to the sacral ganglia where it remains quiescent until reactivation occur. Inguinal and sometimes femoral lymph nodes are enlarged and tender.
- Recurrent attacks are generally milder
- Complications are rare and include: Meningitis, proctitis and pharyngitis.
- Diagnosis: Isolation of virus in tissue culture.
- Treatment:
 - ✓ Acyclovir (One tablet 200mg 1x5x5).
 - ✓ Local cream in mild and recurrent infection.
 - ✓ 5 mg/kg body weigh (8) hourly for 5days I.V in severe infection.

8- Genital warts (Condylomata Acuminata):-

- Caused by a small DNA virus, the human papilloma virus of which there are many subtypes. Type 6,11 and 18 are commonly associated with genital warts.
- The condylomata may be soft fleshy projection usually present in clusters and rarely single or flat.
- Warts may regress spontaneously or may enlarge significantly commonly in pregnancy.
- There is association between warts and cervical and vulval cancer.
- Diagnosis: By clinical grounds or by histological examination of biopsy.
- Treatment:
 - ✓ Podophyllin (local cytotoxic agent which can be applied to the affected area). C/I in pregnancy.
 - ✓ Local ablation with laser.
 - ✓ Cryocautary or diathermy.

9- Granuloma venrum:-

- Caused by gram negative bacilli which appears as intracellular bodies called Donovan bodies.
- The lesion starts as a red papule which develop into a beefy red ulcerated mass of granulation tissue. Inguinal glands enlarge but do not suppurate.
- Diagnosis: By showing Donovan bodies in sample taken from the edge of the ulcer.
- Treatment: Tetracycline or Erythromyin 500mg (6) hourly for 21 days.

10- Chancroid (soft sore):-

- A genital ulcer accompanied by suppurative lymphadenopathy.
- The ulcers are usually multiple and painful.
- The causative organism is a gram-negative bacillus *Haemophililus ducreyi*.
- Diagnosis: By demonstration of the organism in the discharge obtained from the ulcer or lymph node stained by gram stain or immunofluorescent stain.
- Treatment: Sulfamethoxazole 1mg (4) times daily for 21 days.

11- Trichomonas vaginitis:-

- Flagellate protozoan with four anterior flagella, undulating membrane and a long tail. It is ovoid or pear shape slightly larger than a leucocyte.
- Causes 1/3 of all cases of vulvo-vaginitis.
- The main presentation is vaginal discharge, pain and soreness of the vulva and itching.
- The discharge is classically profuse, greenish, frothy mal-odorous (fishy).
- The vaginal wall may shows small strawberry spots.
- The presence of the organism is conformed by simple microscopy.
- Treatment: Metronidazole (200mg three times daily for 7day, or a single dose of 2gm) for both partners.

12- Gardnerella vaginalis:-

- Is a gram negative facultative anaerobic bacillus.
- Cause a frothy, grey, mal-odorous discharge the odour increase if the smear is treated with 10% koh.
- Epithelial cells with bacilli attached to the surface (clue cells) are characteristic.
- Treatment: Metronidazole

Thank you...