SUMMARY

Viruses are intracellular parasites. They contain either RNA or DNA which may be single-stranded or double-stranded and they express this genetic information during replication using the protein synthetic apparatus of the host cell.

Viruses play an important role in many sexually transmitted diseases as genital herpes, anogenital warts, molluscum contagiosum hepatitis, cytomegalovirus and AIDS.

Genital Herpes

Herpes virus (HSV) infection of the genital tract is a sexually transmitted disease that is increasing in incidence at an epidemic rate. Most genital tract infections are with type 2, but about 30% of cases are associated with HSV type 1. Initial exposure to the virus usually produces acute symptomatology and severe discomfort, but the disease may be asymptomatic. After infection the virus become latent and the patient is at risk for recurrent herpes, the potential of transmitting the virus to the newborn, reactivation in patients who become immunosuppressed and genital malignancies later in life. Specific treatment include: Acyclovir (Zovirax), Methisoprinol, Isoprinosine and trisodium phosphonoformate.
Anogenital Warts (Condylomata acuminata)

Genital warts are usually sexually transmitted, are usually acuminate and are usually caused by HPV₆. Some genital warts contain other virus types notably HPV₂. The typical genital wart is soft, pink, elongated and often pedunculated. Recent studies have suggested an association between HPV infection and premalignant and malignant disease of the female genital tract. Cofactor may play some role in the development of malignancy. There are great differences amongst treatment regimens ranging from no therapy in some cases to extensive surgical excision in others. The most commonly used preparations are: Podophylline, Colchicine, acetic acid and 5-fluoro-uracil cream.

Molluscum Contagiosum

It is an infectious disease caused by poxvirus mollusci. It is a papulo-nodular lesion of the skin which is transmitted by direct contact, by fomites and may be transmitted sexually. The lesions are discrete, slightly umblicated, dome shaped papules that usually are fleshy in colour but may be pink or gray. Treatment of molluscum contagiosum remains non specific. Local methods include surgical removal and local application of chemicals. Inosiplex is used as a systemic treatment.
Hepatitis

Hepatitis is one of the most serious and disabling of the sexually transmitted diseases. Most of cases are caused by hepatitis-A virus, hepatitis-B virus or non-A non-B hepatitis virus. Hepatitis-A is also known as infectious hepatitis and hepatitis-B as serum hepatitis. Hepatitis A, hepatitis B and non A non B may be transmitted in several ways (Parenteral, enteral and venereal). The risk of infection with hepatitis B can now be lessened by hepatitis B vaccine which is given in a dose of 20ug in 1 ml. I.M. at 0, 1 and 6 months.

Cytomegalovirus

CMV is a member of herpesvirus group which possesses the cardinal characteristics of latency-reactivation and potential oncogenicity. Most CMV infections are asymptomatic. Infants and children acquire CMV infection either from other infected children or from their mothers either in utero, at birth or during the perinatal period. Intrauterine infection with CMV is the most common of all intrauterine infection and it may give rise on the one hand to generalised damage to many organs and on the other hand to asymptomatic infection which may later result in extensive abnormality, hearing defects and impaired development. After infancy, CMV is acquired from intimate
contact via saliva, semen and vaginal secretions. Venereal transmission appears to be a major source of infection in some adult populations. CMV can also be transmitted via blood transfusion, breast milk and transplanted organs. CMV is a major cause of death in patients with AIDS.

Hyperimmune globulin has shown some promise in the therapy of CMV. Also Acyclovir and guanosine analog similar to it are used for treatment of CMV.

**AIDS**

This syndrome was first reported in male homosexuals in the United States in 1981, after that it has reached epidemic proportions throughout the Western world and parts of Africa. It is now known to be transmitted in blood and blood products, intravenous drug abusers who share needles and heterosexuals. Also haemophiliacs are at high risk.

It is caused by retrovirus known as LAV (Lymphadenopathy associated virus) or HTLV-III virus (Human T-lymphotropic virus type III).

Patients with AIDS present with opportunistic infections especially Pneumocystis carinii pneumonia or neoplasms, usually Kaposi's sarcoma.

An effective treatment of the virus does not exist. Prevention of the disease depend on education about the sexual transmission of the virus, screening of blood donors for HTLV-III and heat treatment of blood products.