ACQUIRED IMMUNODEFICIENCY SYNDROME

" AIDS "

ESSAY

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ВΥ

EL-SAEED FARAHAT EBADA

M.B. B. Ch.

Ain-Shams University

(Working in Saudi Health Ministry)

SUPERVISORS

Prof. Dr. AHMAD ROUSHDY AMMAR

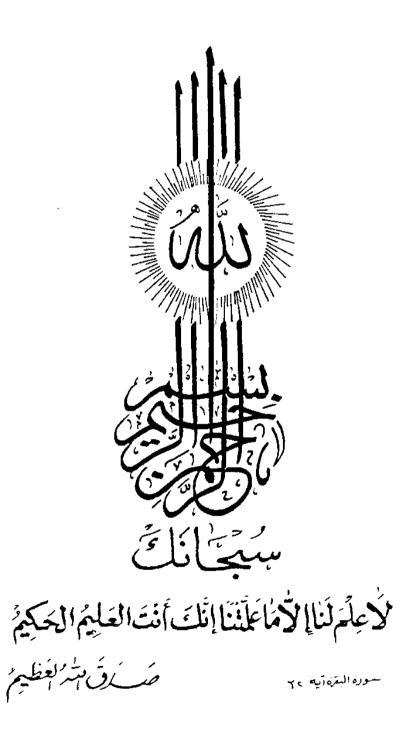
Head of Dept. of Obst. & Gynec.

Ain-Shams University.

Dr. ALLA EL-DEEN M. EL-ETRIBY Lecturer of Obst. and Gynec. Ain-Shams University.

FACULTY OF MEDICINE AIN-SHAMS UNIVERSITY

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INTRODUCTION

Despite all the advances in medicine, sexually transmitted disease (STD) remains a serious public health problem.

The high prevalence of STD may be influenced by multiple factors. The sexual revolution, the introduction of contraceptives, and the availability of penicillin for effective treatment of gonorrhea and syphilis are only a few prominent examples. However the change is not limited to the incidence but extends also to the nature of STD.

Many newly recognized STDs have multiple modes of transmission, with the proportion of sexual transmission increasing in sexually active or promiscuous populations.

However it was not until 1981, when the acquired immunodeficiency syndrome (AIDS) was recognised, that the impact of STD in gay population become fully realized. The pathogenesis of AIDS is still unclear, but gays obtain this syndrome because an infectious agent, the HTLV-lll virus, is transmitted through sexual contacts. As a result. The patient's

cellular immunity is damaged and multiple opportunistic infections follow, leading to a fatal autcome. The opportunistic infictions are seen mainly in the lung, the brain, and the gastrointestinal tract. These infections are not always directly transmitted through sexual contact but are intimately related to or are an indirect result of sexually related infections. These infections are by no means less important than those directly transmitted sexually (Tsieh Sun, 1986).

AIM OF THE WORK

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The acquired immunodeficiency syndrome (AIDS) is a recognized viral syndrome that is primarily seen in homosexuals, bisexuals, intravenous drug abusers, and hemophilliacs as well as the sexual partners, infants, and blood transfusion recipients of these populations. Women constitute only 7% of the affected population, and approximately 17% of these women have no apparent risk factors.

This is an essay to update our knowledge in the AIDS and its relation to public health.

HISTORY AND DEFINITION OF ACQUIRED IMMUNODEFICIENCY SYNDROME

(AIDS)

The first clinical descriptions of the acquired immunodeficiency syndrome (AIDS) were reported in When groups in New York and San Francisco described the occurence of pneumocystis carinii pneumonia or kaposi's sarcoma in previously healthy homosexual men. The case definition of AIDS given below was published by the centers for disease control in September, 1982, and has since been The definition includes periodically updated. persons with unexplained opportunistic infections and certain malignancies that are indicative of an underlying acquired immunodeficiency. The etiologic agent of AIDS was first isolated in 1983, independantly by French and American investigators, and named lymphadenopathy associated virus (LAV) or human T-cell lymphotropic virus type III (HTLV-III).

For surveillance purposes in adults. AIDS is defined as the occurrence of biopsy-proved Kaposis sarcoma and/or biopsy-or culture- proved infection at least moderately predictive of cellular immune deficiency. In the original definition patients who

either had received immunosuppussive therapy before the onset of illness or had preexisting illnesses associated with immunosuppression, such as congenital immunodeficiency or lymphoreticular malignancy, were excluded. Also excluded were persons with kaposis sarcoma who were more than 60 years of age.

Infections considered at least moderately predictive of underlying cellular immune deficiency are as follows:

A. Protozoal and Helminthic Infections :

- 1 Cryptosporidiosis, intestinal, causing diarrhea
 for > 1 month (on histologic examination or
 stool microscopy).
- 3 Strongyloides, causing preumonia, central nervous system infection, or disseminated infection (on histologic examination).
- 4 Toxoplasmosis, causing pneumonia or central nervous system infection (on histologic examination or microscopy).

B. Fungal Infections:

- 1) Aspergillosis, causing central nervous system or disseminated infection (on culture or histologic examination).
- 2) Candidiasis, causing esophagitis (on histologic examination, microscopy of a "wet preparation" from the esophagus, or endoscopic findings of white plagues on an erythematous base.
- 3) Cryptococcus, causing pulmonary, central nervous system, or disseminated infection (on culture, antigen detection, histologic examination or India ink preparation of cerebrospinal fluid).

C. Bacterial Infections:

1) 'A typical' mycobacteriosis (species other than Mycobacterium tuberculosis or Mycobacterium leprae). Causing disseminated infection (on culture).

D. Viral Infections:

1) Cytomegalovirus, causing pulmonary, gastrointestinal tract, or central nervous system infection (on histologic examination).

- 2) Herpes simplex virus, causing chronic mucocutaneous infection with ulcers persisting > 1 month or pulmonary, gastrointestinal tract, or disseminated infection (on culture, histologic examination, or cytologic testing).

The Revised Definition is as Follows:

- A. In the abscence of the opportunistic diseases required by the above case definition, any of the following diseases will be considered indicative of AIDS in the patient who has a positive serologic or virologic test for HTLV-III/LAV infection.
- 1 Histoplasmosis, disseminated (not confined to lungs or lymph nodes) (on culture, histologic examination, or antigen detection).
- 2 Isosportasis, intestinal, causing diarrhea for
 > 1 month (on histologic examination or microscopy).
- 3 Candidiasis, bronchial or pulmonary (on microscopy or by presence of characteristic white

plaques grossly on the bronchial mucosa-not culture alone).

- 4 Non-Hodgkin's lymphoma of high grade pathogenic type (deffuse, undifferentiated) and of B-cell or unknown immunologic phenotype, diagnosed by biopsy.
- 5 Kaposis sarcoma, in patient < 60 years of age (on histologic examination).
- B. Patients who have a lymphoreticular malignancy diagnosed > 3 months after the diagnosis of an opportunistic disease used as a marker for AIDS will not longer be excluded as AIDS cases.
- C. Patients will be excluded as AIDS cases if they have a negative result on testing for serum antibody to ETLV-III/LAV, have no other type of HTLV-III/LAV test with a positive result, and do not have a low number of T-helper to T-suppressor lymphocytes. In the abscence of test results, patients satisfying all other criteria in the definition will continue to be included.

Investigation of the epidemiology of HTLV-III/LAV infection was initially based on case detection with the centers for disease control case