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AIDS AND HOMOEOPATHY

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Acquired immunodeficiency syndrome (AIDS) is a new disease for mankind as it is only a decade old. In recent times, in the history of world medicine no disease has received such attention, public alarm and concern as AIDS.

The terrible fact is that AIDS is more than just a disease, a medical condition, a health problem. It is a threat to social and economic development, to people in the most productive phase of lives, to family life, to mother and their children, to entire culture and population.

AIDS today is a harsh reality and whether we like it or not, it has come to stay. WHO estimates predict that there will be about 60,000 patients with AIDS in the country by 1995.

It is no doubt that the infection has entered the mankind in significant way only around early 1970 and that is why overt cases of AIDS occurred from 1980 onwards.

Rapid progress has been made in understanding the natural history, biology, mechanism of pathogenesis and molecular biology of virus.

AIDS is caused by HIV (Human immunodeficiency virus). It is a retrovirus because it reverses the genetic information of the host cell, with the enzyme reverse transcriptase.

Definition of AIDS

CDC (CENTRE FOR DISEASE CONTROL)

AIDS is a disabling or life threatening disease caused by human deficiency virus (HIV) characterized by HIV encephalopathy, HIV wasting syndrome or certain evidence of HIV infection, without certain other causes of immune deficiency.

WHO

Adult AIDS is defined by the existence of at least two major signs associated with at least one minor sign, in the absence of known causes of immune suppression such as Cancer or severe malnutrition of other recognized etiologies.

Major signs – (i) Weight loss of 10% of body weight.
(ii) Chronic diarrhoea of more than one month.
(iii) Prolonged fever–one month intermittent or constant.

Minor signs – (i) Persistent cough of one month.
(ii) Generalized Pruritic Dermatitis.
(iii) Recurrent Herpes Zoster.
(iv) Oropharyngeal candidiasis.
(v) Chronic progressive and disseminated Herpes simplex.
(vi) Generalized lymphadenopathy.

Biology of AIDS Virus

A portrait of HIV shows the virus is circular and measures about 80–100 nm, in diameter. It has an eccenteric core made up of genetic material, ribo-nucleic acid (RNA) with the enzyme reverse transcriptase attached.

HIV is sensitive to

— 56°C for 30 min. – 100% activity
— Ether, Acetone
— 20% ethanol
— 0.2% sodium hypochlorite
— B-propiolactone (1:400 dilution)
— Sodium Hydroxide 40 m Mol/litre
— 1% gluteraldehyde
— Ionizing radiation and UV light

Pathogenesis

There are two forms of immunity in man. One is in the form of free antibody in blood known as humoral immunity. Such immunity is useful in fighting organisms like bacteria. Some organism like virus, parasites remain within the cells of the body (intracellular) and thus escape the attack of free antibody in the blood or human immunity. For such intracellular organism, a

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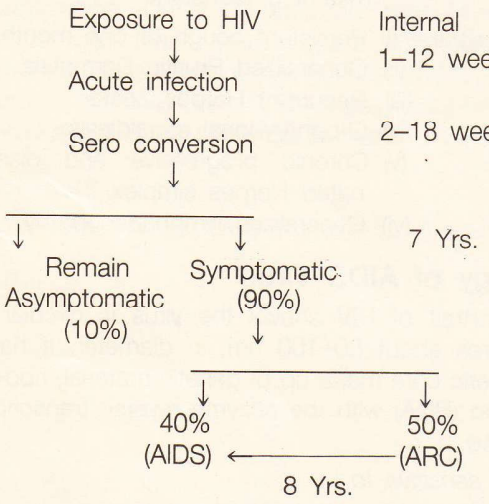
different kind of immunity is effective which is known as cell mediated immunity. Cell mediated immunity is mediated through lymphocytes and macrophages.

T_4 Th –T helper cells.
TB TB –T suppressor cells.

Functions of Helper Cells

1. Activation of Macrophages Phagocytosis (Parasites etc).
2. Induction of B Cell function – antibody formation.
3. Induction of cytotoxic T cell function.
4. Induction of suppressor T cell function.
5. Secretion of growth and differentiation factors from lymphoid cells.
6. Secretion of haematopoietic colony stimulating factors and secretion of factors that induce non-lymphoid cell function.

HIV infects selectively the T helper lymphocytes, invades them resulting in gross depletion. This quantitative depletion of T Helper lymphocytes is the central defect in AIDS.



Mode of Transmission

i) Sexual — Homosexual
— Heterosexual
— Bisexual
ii) Parental route via contaminated needles IV Drug Users.
iii) Through transfusion of contaminated blood and blood products. A contaminated unit of blood has 90% chance of infecting the recipient.
iv) Transplacentally in the newborn 30-35%. In rare instance breast milk may also transmit HIV infection.

Routes Investigated & Not Shown to be Involved in Transmission

(i) Close personal contact.
(ii) Household contact.
(iii) Work place contact.
(iv) School contact.
(v) Health care workers without exposure to blood & body fluids.
(vi) Blood sucking insects including mosquitoes and bed bugs.

Clinical Presentation

There are four general categories of clinical manifestations:

(i) those due to direct effects of the virus.
(ii) those related to opportunistic infection to HIV induced immune suppression.
(iii) those caused by Kaposi's Sarcoma.
(iv) those arising due to the continued effects of HIV induced immune suppression and the malignancy promoting effects of other viruses.

Spectrum of HIV Induced Disease

1. Acute Sero-conversion illness.
2. Asymptomatic viral carriage.
   2.1 with normal CMI
   2.2 with abnormal CMI
3. Persistent generalized lymphadenopathy.
4. Acute Immune Thrombocytopenia.
5. AIDS related complex and HIV constitutional disease.
6. Subacute Encephalitis (HIV Dementia complex).
7. AIDS – opportunistic infection, malignancy.

I. *Acute Sero Conversion Illness*

In about 15% of the persons getting HIV infection, an acute viral illness develops about 6 weeks after the entry of the viruses in the body. Clinically it resembles infectious mononucleosis with high fever, skin rash, headache, muscle pains, joint pains and enlarged lymph nodes in the neck and axillae. Encephalitis and aseptic meningitis can occur. On an average the illness clears up by 2 weeks. If tested for HIV, the person would now show a positive serological test. Hence the name seroconversion illness.

II. After the acute seroconversion illness the individual becomes asymptomatic. He may remain in this stage for a long period (average 7-9 years). He is asymptomatic, in this stage but is fully infectious and can spread infection by blood and body fluids.

III. *Persistent Generalised/Lymphadenopathy (PGL) Syndrome*

It is defined as enlarged nodes at least 1 cm in diameter or greater in two more extra inguinal sites (non-contiguous) that persists for more than at least 3 months in the absence of any current illness or mediator known to cause enlarged nodes. Biopsy reveals non-specific lymphatic hyperplasia.

IV. *HIV Constitutional Diseases and AIDS Related Complex (ARC)*

Within an average of 7-9 years sometimes even earlier, an individual who is seropositive starts developing recurrent diarrhoea, night sweats, fever and weight loss. This is identified as ARC – AIDS related complex. The scope of viral infection changes from entirely healthy asymptomatic Sero positive persons to persons with severely deranged immunity and life threatening opportunistic infection. In between these two poles lie those patients which are having ARC.

ARC is diagnosed in person who presents with any two or more signs and symptoms with any two or more abnormal laboratoary parameters given below which is present for more than 3 months.

Symptoms and Signs of ARC

Fever more than 38°C intermittent or continuous
Weight loss more than 10% of the basal B.W.
Persistent generalised lymphadenopathy
Diarrhoea intermittent/continuous
Fatigue
Night sweats
Laboratory abnormalities
Lymphopenia
Leucopenia
Anaemia
Reduced CD_4 CD_8 (more than SD)
Reduced helper cells
Reduced blastogenosis
Reduced V Globulin
Cutaneous anergy

ARC heralds the onset of terminal phase of HIV infection. Some may develop minor opportunistic infections like oral candidiasis (thrush). This condition of ARC with minor opportunistic infection is known as constitutional disease.

AIDS or Full Blown AIDS

Within short time of ARC the HIV infected individual goes down further. T_4 (CD_4) cell count goes below (200/cu mm), opportunistic infections – which are life threatening manifest as below:

(a) Fungal infection – candida, histoplasma cryptococcus.
(b) Protozoal infections–Pneumocystitis Carinii, Cryptosporidium, Isospora & Toxoplasma, Giardia lamblia and Entamoeba histolytica.
(c) Bacterial infections – Typical and atypical mycobacterial infection, Salmonella and Shigella.
(d) Helminthic infections – generalized strongyloidiasis.

Opportunistic Cancers such as centralized and generalized and aggressive form of Kaposi's Sarcoma and high grade B cell lymphoma of the brain are also found in these persons.

Opportunistic Infections of AIDS

Pneumocystis carinii pneumonia

Comprises 50% of opportunistic infections

Commonest presentations are:

Non-productive cough & dyspnoea-days to weeks
XR Chest: Interstitial pneumonia
Age: Hypoxia, Hypercapnia
Gallium Scan: Abnormal
Sputum shows cysts of P. Carinii by nebulized saline spray
Pulmonary function testing.

12% of patients present with symptoms other than P. Carinii infection.

Other Common Opportunistic Infections are:

1. Recurrent mucosal candidiasis
2. Disseminated CMV infection
3. Severe progressively Ulcerating H. Simplex virus infection in the perianal region in about 12% of the cases.

Unusual Opportunistic Infections.

1. Atypical mycobacterial infection
2. Toxoplasmosis of the C.N.S.
3. Severe persistent diarrhoea due to cryptosporidium or Isosporabelli
4. Other G.I. Pathogens: recurrent shigella by campalybacteria jejuni
5. Adenovirus infection
6. Biliary tract disease: acalculus cholecystitis

Mycobacterium A. Intercellularae & M. Tuberculosis: Common & difficult to treat in HIV infection.

Extrapulmonary forms of tuberculosis are more common like:

1. Affecting the blood stream
2. CNS
3. The Gastrointestinal Tract
4. The Lymphatic system
5. Bone Marrow

Syphilis is a Major Problem in HIV infected patient.

(e) Central Nervous System HIV Disease
   a. Subacute encephalitis or AIDS dementia complex, clumsiness and slowing down movements, disturbances in thought process, behavioural abnormalities.
   b. AIDS myelopathy – a special type of spinal cord damage (Vacuolar myelopathy).
   c. AIDS neuropathy – pins and needles on the tips of fingers and toes.
   d. Polymyositis – may be the first manifestation.

(f) Other System Involvement

F.1 Renal dysfunction–Protenuria with segmental and focal glomerulosclerosis kidney biopsy. Abnormality in the mesangium.
Acute Renal Failure.
Chronic Renal failure.

F.2 Congestive cardiomyopathy due to HIV infection of the myocardium.

F.3 Non specific intestinal pneumonitis mimicking P. Carinii infection in the lungs.

Mortality Rate

The mortality associated with AIDS has been extraordinarily high, exceeding 80% within three years of diagnosis and with a mean time from diagnosis of AIDS to death of less than two years.

Laboratory Diagnosis of AIDS

Direct Tests

1. Detection of live virus – Culture
2. Detection of viral antigen – Enzyme immuno-assay technique.
3. Detection of antibody to HIV – 100 per cent success
   - ELISA–Screening
   - WESTERN BLOT–Confirmatory.

Indirect Tests

1. T helper lymphocyte count
   NORMAL – 600 to 1400/cu mm
2. Diminished response to skin test antigens
3. Increased level of Immunoglobulins and circulating immune complexes
4. Tests for abnormal level of other elements
   - beta-2 microglobulin
   - alpha-1 thymosin
5. Lymph Node Biopsy

Predictors of AIDS

1. CD4 Helper lymphocyte count
2. Presence of HIV P24 Ag.
3. Concentration of beta-2 Microglobulin
4. Presence of Neopterin.

Homoeopathic Approach

There is wide spread, but more or less instincitive feeling in the Homoeopathic world that homoeopathy has something important to offer in the therapy of this epidemic.

Management of AIDS requires a combination of approaches: preventive, therapeutic and supportive. Homoeopathy views the situation in context with other viral infections and takes into account the persons state preceding the infection with HIV.

Treatment is given in the following areas

1. HIV positive asymptomatic persons who have probability of developing full blown AIDS in the next 1-7 years. – Constitutional treatment
2. Symptomatic HIV positive cases — On Signs and symptoms

Emphasis is made to

- Clinically control the progress of disease.
- Reversal of ELISA (Sero+ve to Sero–ve).
- Enhance immuno cell function through restoring the normal T4/T8 ratio.
- Inhibit reverse transcription thereby blocking replication of HIV.

Drugs for Asymptomatic Carriers

Arsenicum album,	Arsenicum iodatum,
Bacillinum,	Baryta carbonica,
Argentum metallicum,	Calcarea carbonica,
Calcarea iodata,	Carbo animalis,
Carbo vegetabilis,	Causticum,
Fluoricum acidum,	Hepar sulphuricum,
Kali carbonicum,	Kali iodatum,
Lachesis,	Mercurius solubilis,
Mercurius iodide,	Natrum muriaticum,
Natrum sulphuricum,	Nitric acidum,
Phosphorus,	Sepia,
Silicea,	Sulphur,
Syphilinum,	Thuja and Tuberculinum

ARC/AIDS related rubrics in Kent's Repertory*

1. Reaction, lack of – p. 1152
2. Irritability (physical), lack of – p. 1129
3. Perspiration, night – p. 1068
4. (a) Perspiration, night, lasting all night without relief – p. 1068
   (b) Perspiration, night, long lasting, musty night sweats – p. 1068
5. Diarrhoea – p. 521
   (a) Diarrhoea, emaciated people, in – p. 524
   (b) Diarrhoea, septic conditions, from p. 526
6. Insidious fever – p. 1062
7. Pain (Head) – p. 110
8. Emaciation – p. 1120
9. Inflammation, glands – p. 1128
10. Throat, pain, swallowing on – p. 390
    (a) Thoat, discolouration, white spots – p. 383
    (b) Throat, cheesy looking spots – p. 381
    (c) Mouth, discolouration, white – p. 341
    (d) Mouth, discolouration, white, cheesy – p. 341
    (e) Mouth, discolouration, white, milky – p. 341

* Kent's Repertorium Generale by Jost Kunzli von Fimmelsberg – Indian English Edition – 1987

(f) Mouth, discolouration, white silvery, all over – p. 341

11. Respiration, asthmatic – 650
    (a) Respiration, difficult – p. 652
    (b) Respiration, impeded, obstructed – p. 657
12. Cough, dry – p. 667
13. Rectum, ulceration – p. 540
14. Memory, weakness of – p. 51
    (a) Dementia with sadness – 28
15. Cancerous affections, – p. 1111
    (a) Cancerous affections, glands – p. 1111
16. Skin, discolouration, bluish – p. 1077

Remedies for HIV infection

Acute seroconversion	*ARC/AIDS*
Baptisia tinctoria	Alumina,
Belladonna	Agaricus, Apis mellifica, Aurum metallicum
Bryonia alba	Aranea diadema, Arsenicum album,
Ferrum phosphoricum	Arsenicum iodatum, Argentum
Gelsemium	nitricum, Bacillinum, Badiaga,
Hepar sulphuricum	Baptisia, Belladonna, Baryta
Mercurius solubilis	carbonica, Baryta muriaticum,
Pulsatilla nigricans	Berberis vulgaris, Bryonia,
Rhus toxicodendron	Calcarea carbonica, Calcarea phosphoricum, Carbo animalis, Carcinosin, Cascara sagarida, Cistus canadensis, Clematis erecta, Convallaria, Conium maculatum, Cortisone, Cyclosporine, DNA, Dulcamara, Fluoric acid, Hepar sulphuricum, Kali carbonica, Kali iodatum, Kali muriaticum, Lachesis, Lycopodium, Magnesia phosphoricum, Magnesia sulphuricum, Mercurius vivex, Natrum muriaticum, Natrum phosphoricum, Natrum sulphuricum, Nitric acid, Nux vomica, Parotidinum, Phosphorus, Phytolacca, Pilocarpus, Plumbum iodatum, Pulsatilla, Pyrogenium, Rhus toxicodendron, RNA, Sambucus niger, Sanguinaria, Sarsaparilla, Sepia, Scrophularia, Silicea, Sulphur, Syphlinum, Terebinthina, Thuja, Tuberculinum, Typhoidinum.