



HIV INFECTION & AIDS

Fiona Rattray & Linda Ludwig Pg.1033

HIV & AIDS

- ▶ HIV (human immunodeficiency virus) is the virus that causes AIDS (Acquired immune deficiency syndrome).
- ▶ The immune system is composed of specialized organs and cells that protect the body against infection and the growth of malignant cells.
- ▶ Lymphocytes are small white blood cells, the primary cells of the immune system.
- ▶ They are divided into T-lymphocytes (T-cells), originating in the Thymus. T-cells control viral infection by recognizing antigens on the surface of macrophages. A subset of these cells is called T-4, T-helper, or CD4 cells.
- ▶ B-cells which mature in the bone marrow. B-cells eliminate bacteria and their toxins by producing antibodies.
- ▶ Remaining lymphocytes are called natural killer cells. Natural killer cells rapidly identify and destroy virus-infected cells and tumor cells.

HIV & AIDS

- ▶ First recognized in 1981, HIV is the most common acquired immune deficiency condition in the world today. The virus selectively infects the T-helper cells, destroying them.
- ▶ Over time the weakened immune system is vulnerable to opportunistic infections and other conditions.
- ▶ Cervical cancer: which occurs the HIV infected women at a rate of 5x higher than in other woman.
- ▶ Cryptococcus neoformans: which is yeast that causes meningitis, fever, and severe secondary headaches.
- ▶ Cytomegalovirus: which is an opportunistic infection causing fever, sore throat, fatigue, mm pain, and swollen lymph nodes.
- ▶ Kaposi's Sarcoma: which is cancer of the capillaries. Lesions start small, purple, raised patches, often on the legs.



medicalmed.de



HIV & AIDS



- ▶ **Lymphoma**: Cancer of the lymphatic system. With HIV, the lymphoma often involves the central nervous system.
- ▶ **Tuberculosis**: which is an opportunistic bacterial infection affecting the lungs and different areas of the body. Coughing, malaise, fatigue, and night sweats may occur.
- ▶ **Wasting syndrome**: which is diarrhea, fever, chronic weakness, severe weight loss, and loss of muscle mass in the absence of other infections.

HIV TRANSMISSION

- ▶ HIV is a fragile virus that does not survive outside the body.
- ▶ It is not transmitted through casual contact such as touching or sharing eating utensils, nor it is airborne.
- ▶ The virus cannot pass through skin that has no cuts or abrasions.
- ▶ It is not passed along through a mosquito bite.
- ▶ A person must perform certain actions that allow sufficient quantities of HIV into the bloodstream from the body fluids of someone who has HIV.
- ▶ Actions include: unprotected sexual intercourse, sharing of intravenous needles, and transfusion of unscreened, infected blood and blood products.
- ▶ There are four body fluids that contain HIV in sufficient quantities to cause infection. Blood, semen, vaginal secretions, and breast milk.
- ▶ Urine, sweat, tears, and saliva do not contain enough of the virus to infect a person.

HIV/AIDS STATISTICS

- ▶ More than 95% of HIV-infected people live in developing countries.
- ▶ 33.4 million are infected with HIV.
- ▶ Deaths are amongst young adults, the reproductive and economic impact of HIV/AIDS is enormous.
- ▶ Globally 43 % are women of all adults living with HIV.
- ▶ If a mother has HIV, there is 25% chance that her baby will be infected.
- ▶ Most infections with HIV occurred in young people between ages 15-24 years of age.
- ▶ HIV is commonly thought of in North America and Europe as affecting primarily gay or bisexual men, in most of the developing world it primarily affects heterosexual men and women.

THE POTENTIAL STIGMA OF HIV & AIDS

- ▶ The origin of HIV and how it causes AIDS is not completely understood, and due to its method of transmission and who gets it, a lot of misinformation has surrounded HIV/AIDS.
- ▶ The search for a cure has lead to myths of blame, guilt, and denial.
- ▶ People with HIV/AIDS may feel isolated, afraid, and lonely. Depression and anger, as well it may not be possible for the person to talk about the illness. Potential rejection and discrimination from family, friends, neighbours, and employers.

CAUSE, CONTRIBUTING FACTORS & MEDICAL TREATMENT

- ▶ The cause of HIV infection/AIDS is a retrovirus.
- ▶ Contributing factors to the rate of HIV infection include infections such as hepatitis B, stress, and poor nutrition.
- ▶ Medically, HIV is diagnosed through lab tests which assess for antibodies to the virus.
- ▶ If an HIV positive status is revealed, a series of tests are recommended to determine the person's baseline of health.
- ▶ Medication, anti-HIV drugs inhibit the ability of the virus to replicate itself.
- ▶ While HIV/AIDS is fully preventable, no cure exists. HIV treatment and clinical science are constantly changing; there is still a lot that is not known.

MASSAGE & HIV

- ▶ Massage therapy is often for relaxation.
- ▶ Benefits from studies on the effects of massage therapy and HIV/AIDS showed that one month of daily massage increased the number and activity of natural killer cells in people who were HIV-positive, stimulating immunity.
- ▶ Lymphatic drainage is recommended for treatment of edema that develops secondary to Kaposi's sarcoma.
- ▶ Massage therapy may help the HIV-positive person deal with feelings of loneliness, isolation and guilt.

SYMPTOM PICTURE

- ▶ Initial HIV infection is often symptomless. Some experience **flu-like symptoms**, such as night sweats, sore throat, mm P, headache and swollen lymph nodes when antibodies to the virus are being created.
- ▶ The infected person may continue to be asymptomatic for a long time. In some cases people with HIV continue to feel healthy for 10-15 years. During this period, the person with HIV is capable of infecting others.
- ▶ Blood tests at this point show that T-cell count (CD4) is decreasing and the amount of virus in the blood (or viral load) is increasing.
- ▶ The immune system is no longer able to fend off opportunistic infections.
- ▶ When the immune system is overwhelmed, the person begins to experience symptoms such as swollen lymph nodes, fatigue, recurrent fever, night sweats, diarrhea, decreased appetite, rapid weight loss, mouth sores, vaginal yeast infections, and changes in the menstrual cycle.

SYMPTOM PICTURE

- ▶ The symptoms that the person experience's will depend on which opportunistic infection, present.
- ▶ AIDS dementia may occur.
- ▶ Peripheral neuropathies may result from HIV itself or from medication use.
- ▶ Rheumatic manifestations of severe jt and muscle P may be present. HIV associated arthritis may intermittently affect knees, shoulders and elbows.
- ▶ There may be **periods of relatively good health between bouts of serious illness.**
- ▶ Symptoms may come and go and vary in discomfort and severity. Although AIDS was once thought of as a fatal illness, not every person infected with HIV will become ill or die from AIDS-related illnesses.
- ▶ ****Please read observation and palpation on Pg.1039**

CONTRAINDICATIONS

- ▶ Do not massage over open lesions or over a tumor.
- ▶ General massage is CI'd with significant fever.
- ▶ Avoid working over the insertion site of an indwelling medication catheter if the client has such a device, often on the upper chest.
- ▶ Vinyl gloves are worn as usual if there are any cuts, sores, abrasions on the therapists hands or the client's body.
- ▶ Do not over treat a debilitated client with too long or vigorous a treatment.
- ▶ If the therapist has a contagious illness treating the client likely contraindicated until she is better. This protects the client from getting the illness.

TREATMENT

- ▶ The symptoms and medical treatment protocols are constantly changing, its important for the therapist to update herself on the client's current symptom status and medication usage. Often the client is an expert on treatment protocols.
- ▶ **Positioning:** Prone, side lying, or supine as is comfortable for the client.
- ▶ **Hydro:** Applications depend on the clients symptoms. DDB is very important.
- ▶ Stress reduction is the basic treatment, soothing effleurage, petrissage, rocking and shaking.
- ▶ Lymphatic drainage is used to reduced edema if present.
- ▶ Pure essential oils may be added.
- ▶ Treatment can end with a head, neck, and shoulder massage.

SELF-CARE

- ▶ HIV-positive people are advised to avoid exposure to organisms that cause illness.
- ▶ Self massage of the limbs affected with peripheral neuropathies may help to relieve P.
- ▶ The client can experiment with differing pressures to find the one that helps manage P.
- ▶ Avoiding extreme temperature changes may reduce P.
- ▶ Nightly hydrotherapy applications of cold foot or arm baths are also recommended.
- ▶ Stress-reduction classes and aerobic exercise are important to maintain the health of the immune system.
- ▶ The client is referred to a physician for immediate assessment if new symptoms occur.
- ▶ Self-help and support groups can provide emotional support and an opportunity to learn more about the disease and how others deal with similar issues.