

The Role of Antiretroviral Therapy in Managing AIDS

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DESCRIPTION

Acquired Immunodeficiency Syndrome (AIDS) remains one of the most significant global health challenges of our time. First recognized in the early 1980s, AIDS is caused by the Human Immunodeficiency Virus (HIV), which attacks the immune system, leaving the body vulnerable to opportunistic infections and diseases. Despite substantial progress in AIDS research, prevention, and treatment, the impact of this pandemic on individuals, families, and communities continues to be profound. This article provides an overview of AIDS, highlighting its history, current state, and prospects for the future.

Acquired Immunodeficiency Syndrome (AIDS) continues to be a significant global health issue. Despite advancements in medical research and increased awareness, AIDS remains a persistent challenge with far-reaching consequences. This article aims to provide an overview of AIDS, including its causes, transmission, symptoms, prevention, and treatment.

The origins and causes of aids

AIDS is caused by the Human Immunodeficiency Virus (HIV), which attacks the body's immune system. The virus primarily spreads through unprotected sexual intercourse, sharing contaminated needles, transfusion of infected blood, and transmission from an infected mother to her child during childbirth or breastfeeding. Unprotected sex with multiple partners and intravenous drug use are significant risk factors for contracting the virus. It is important to note that HIV cannot be transmitted through casual contact such as hugging, shaking hands, or sharing utensils.

Recognizing the symptoms

In the early stages, HIV infection may not present any noticeable symptoms. However, as the disease progresses, individuals may experience symptoms such as persistent fatigue, unexplained weight loss, frequent infections, night sweats, swollen lymph nodes, and skin rashes. These symptoms can vary from person to

person, and it is essential to seek medical attention if there is a suspicion of HIV infection.

Prevention strategies

Prevention plays a crucial role in combating AIDS. Promoting safe sexual practices, including consistent condom use, and reducing the number of sexual partners significantly reduce the risk of HIV transmission. Additionally, avoiding sharing needles and using sterile equipment for drug injections are vital to prevent the spread of the virus among intravenous drug users. Routine screening and testing are essential, particularly for individuals engaging in high-risk behaviors.

Treatment and management

Advancements in Anti-Retroviral Therapy (ART) have revolutionized the treatment of HIV/AIDS. ART helps slow down the progression of the disease, allowing individuals with HIV to lead longer and healthier lives. It involves a combination of medications that suppress the virus, reducing its ability to replicate and weaken the immune system. Early diagnosis and timely initiation of ART significantly improve treatment outcomes. Alongside medical interventions, comprehensive care, including psychosocial support and access to education, plays a critical role in managing the physical and emotional aspects of living with HIV/AIDS.

AIDS remains a global health challenge, affecting millions of individuals worldwide. Despite progress in research and treatment, the social stigma and discrimination associated with AIDS persist, hindering prevention efforts and the provision of adequate care. Combating AIDS requires a comprehensive approach that includes education, awareness, and addressing societal biases.

For patients who are just starting HIV treatment, pills are advised. HIV enters CD₄ (Cluster of Differentiation 4) cell and multiplies there after HIV destroys the CD₄ cell fresh HIV copies seek out CD₄ cells to enter and re-start the cycle. HIV destroys immune system cells that body needs to fight off illnesses and infections.

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