

# **CURRENT TREND FOR HIV DIAGNOSIS AND TREATMENT**

**A SEMINAR PRESENTATION**

**BY**

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**TO THE**

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# SUMMARY

Hiv testing has evolved from being used as a method to safeguard the blood supply to being offered as a routine diagnostic test. The major deficiencies of early Hiv tests have largely been overcome with the advent of the fourth and fifth generation assays. Hiv testing has progressed to where infection can be detected approximately 2 weeks post infection,

# SUMMARY CONT'D

with a reduced number of false-positive results compared to those seen with early Hiv assays. The Bioplex 2200 antigen-antibody assay and a rapid test known as Alere-Determine Hiv antigen-antibody combo are the current diagnostic test for Hiv. The use of Ibalizumab and Antiretroviral drugs decreases the viral load and increases the lifespan of the patients.

# Human Immunodeficiency Viruses

Hiv is the acronym for Human Immuno Deficiency virus. Hiv is a virus that kills immune cells in the body. Hiv infection progresses to the Acquired Immuno Deficiency Syndrome(AIDS). Hiv was first recorded in the United States in the year 1980.It rapidly spread all over the world leading to world wide pandemic. Hiv is transmitted by three main ways: sexual contact, exposure to infected body fluids or tissues and from mother to child during pregnancy, delivery and breastfeeding

# CLINICAL FEATURES OF HIV

- Fever or rise in body temperature
- Nausea
- Body rash
- Vomiting
- Weight loss
- Weakness
- Night sweat

# **CURRENT TRENDS IN HIV DIAGNOSIS**

The Bioplex 2200 Hiv antigen-antibody assay is the current assay. It is the first assay that can simultaneously detect and differentiate the p24 antigen and antibodies to Hiv-1 and Hiv-2 in one set of results. The window period is 12days. Currently there is a 4-5 generation rapid test, known as Alere determine Hiv antigen-antibody combo which provides separate results for Hiv antigen-antibody but does not differentiate Hiv-1 antibody from Hiv-2 antibody.

# **CURRENT TRENDS IN HIV MANAGEMENT**

Management of Hiv has now become easier . This is made possible by the availability of many low cost generic and a host of refinements to existing drugs and clinical profiles and the new formulation (e.g a 3-in-1 daily tablet <Atripla>). The use of ART(Antiretroviral Therapy/Treatment) which increases the lifespan of the patients and it also reduces the occurrence of AIDS defining illnesses.

# **CURRENT TRENDS IN HIV MANAGEMENT CONT'D**

Use of Ibalizumab; a drug that targets the primary receptor of Hiv entry into immune cells known as CD4 T cells . It also decreases the viral load (amount of Hiv detected in the blood ). It also increases the CD4 T cells (which are the marker for immune strength).synthetic peptide drugs are upcoming strategies with low toxicities being evaluated as Hiv entry inhibitors for treatment.



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**THANKS  
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LISTENING**