

Viral hemorrhagic fever

Dr. Fares

Agents

- Distinct viruses
- Causes HF syndrome
- All are SS RNA viruses with Lipid envelope
- Families:
 - I. Filoviridae
 - II. Flaviviridae
 - III. Arenaviridae
 - IV. Bunyaviridae

Filoviridae

Ebola

Marburg virus

Flaviviridae

Yellow fever

Dengue fever

Arenaviridae

Lassa fever

Bunyaviridae

Hanta virus

Rift valley fever

Dx

- PCR
- ELISA
- Viral culture

Clinical syndrome

- Infectious does : 1-10 viruses (highly pathogenic)
- Systemic illness + fever
- Capillary dysfunction
- Prostration
- Shock
- CNS Dysfunction
- Bleeding: low platelets, endothelial dysfunction
 - hemorrhagic rash, epistaxis, hemoptysis

Ebola

- Discovered in 1976
- IP: 2-21 days
 - N, V, abdominal pain
 - Fever, Weakness
 - Organ failure + bleeding
- Death in 60-90% of patients
- Highly infectious
- Modes of transmission:
 - Person to person contact with blood or body fluids, contact with primates
- No specific treatment, supportive care only
- Major outbreak in west Africa
- By end of Oct. 2014: 10,000 cases; half of them died
- Reservoir: primates, bats
- Vaccine: under development

Yellow fever

- Endemic in sub-Saharan Africa and South America
- Transmission by mosquito
- Mild (most common) –Severe (hepatitis, bleeding, renal failure, shock, and death)
- Mortality: 5-20%
- Vaccine: the only one of the HF to have a vaccine
 - live vaccine
 - used with people traveling to endemic areas

Thank you