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Ebola virus

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Introduction

Ebola virus one of the known virus which causes fatal hemorrhagic fever in both human and mammals. This disease is called as Ebola virus disease. It was named according to their origin. In early days it is called a marburgvirus , because they are closely related to this virus. Then it was renamed in 2010 as Ebola virus. The Ebola virus disease is spread through the bats especially fruit-bearing or fruit consuming bats. The disease affects humans through animals.

Structure of Ebola virus

It is a single-stranded RNA which contains 19000 nucleotides. It includes many structural proteins such as nucleoprotein polymerase cofactor, transcription activator and RNA dependent RNA polymerase.

By direct contact, the virus is also spread through body fluids, blood from the infected humans and animals. It can also spread through contaminated body fluid, air and natural conditions. The main host of Ebola virus disease bat without being affected by that virus. The hemorrhagic fever, malaria, cholera, typhoid may resemble in ebola virus disease. A blood sample is taken for the diagnosis of viral antibodies, viral RNA for confirming the disease.

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Fig. 1: Ebola Virus

Signs and symptoms of Ebola virus disease

- The signs and symptoms of Ebola virus disease is expressed in 2 - 21, 4 -10 days
- The primary stage of symptoms is fever, muscular pain, joint pain, headache, throat pain.
- Fever is followed with nausea, vomiting and hiccups.
- In some times internal and external bleeding occurs, it is expressed between 5 – 7 days after the primary symptom
- The disease affected person show depressed blood clotting
- Bleeding from the mucous membrane, vomiting blood, while coughing up and blood in the stool.
- Bleeding can also occur in whites of eyes.
- The recovery of the disease may occur between 7 – 14 days when primary symptoms showed
- The people may come to death or in coma stage till their end of the life

Prevention of Ebola virus disease

- Stay away from the direct contact with the bodily fluids of people with Ebola or unknown illnesses,
- including urine, blood, saliva, vomit, semen, breast milk, vaginal fluid.
- Avoid both live and died wild animals because they could be potential carriers of Ebola,
- including gorillas, monkeys, fruit bats, porcupines, chimpanzees, forest antelope.
- Disinfect or dispose of instruments and equipment properly after treating Ebola patients.

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Reference

1. Bowen, E.F.W.; Lloyd, G.; Harris W.J; Platt, G.S; Baskerville, A; Vella, E.E. (1997). Viral haemorrhagic fever in southern Sudan and northern Zaire. Preliminary studies on the aetiological agent. *The Lancet*. 309 (8011), 571-573.
2. Quammen, David (2014). Insect-Eating Bat may be origin of Ebola outbreak, New study suggests. *News national- geographic.com*. Washington, Dc: National Geographic Society.