Marburg virus

August 11, 2021 In news-Recently, Guinea confirmed the first recorded case of Marburg virus death in West Africa.

About Marburg virus

- Marburg virus disease (MVD), formerly known as Marburg haemorrhagic fever.
- Marburg virus disease is a highly virulent disease that causes haemorrhagic fever, with a fatality ratio of up to 88%.
- It is in the same family as the virus that causes Ebola virus disease.
- The virus is passed from animal hosts to humans, like the coronavirus.
- Two large outbreaks that occurred simultaneously in Marburg and Frankfurt in Germany, and in Belgrade, Serbia, in 1967, led to the initial recognition of the disease.
- The outbreak was associated with laboratory work using African green monkeys (Cercopithecus aethiops) imported from Uganda.
- The worst epidemic was in Angola in 2005, with 252 infections and a 90% death rate.
- This epidemic apparently spread through the reuse of contaminated transfusion equipment in a paediatric ward.

Symptoms

Symptoms include headache, vomiting blood, muscle pains and bleeding through various orifices. Many patients develop severe haemorrhagic signs within seven days. Case fatality rates have varied from 24% to 88% in past outbreaks depending on virus strain and case management.

Transmission

- Rousettus aegyptiacus, fruit bats of the Pteropodidae family, are considered to be natural hosts of Marburg virus.
- The Marburg virus is transmitted to people from fruit bats and spreads among humans through human-to-human transmission.
- Once an individual is infected with the virus, Marburg can spread through human-to-human transmission via direct contact with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials contaminated with these fluids.

Treatment and vaccines

Currently there are **no vaccines or antiviral treatments approved** for MVD. However, supportive care rehydration with oral or intravenous fluids – and treatment of specific symptoms, improves survival.

Ebola virus

- Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a rare but severe, often fatal illness in humans.
- Occasional outbreaks of this disease occur mostly on the African continent.
- EVD most commonly affects people and nonhuman primates (such as monkeys, gorillas, and chimpanzees).
- The average EVD case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks.
- Ebola virus was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of Congo

It is caused by an infection with a group of viruses within the genus Ebolavirus, which include:

- Ebola virus (species Zaire ebolavirus)
- Sudan virus (species Sudan ebolavirus)

- Taï Forest virus (species Taï Forest ebolavirus, formerly Côte d'Ivoire ebolavirus)
- Bundibugyo virus (species Bundibugyo ebolavirus)
- Reston virus (species Reston ebolavirus)
- Bombali virus (species Bombali ebolavirus)

Only four (Ebola, Sudan, Taï Forest, and Bundibugyo viruses) have caused disease in people.