



EBOLA: DENTIST'S CONCERN

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Sir, Ebola virus is one among three genera of Filoviridae family about which the exact causative agent, mode of spread, incubation period and outcome is not known till date. The first outbreak was noticed in Marburg, Germany (1967) when some laboratory workers suffering from an unusual disease were admitted to hospital. The next two simultaneous outbreaks (1976) were noticed in Nazara, Sudan and other in a village near Ebola River in Yambuku, Congo, due to this fact the disease is known by this name. The latest outbreak in West Africa was largest and most complex since its discovery. The commonest causative agent was fruit bats or monkeys/apes. The etiopathogenesis is still under scrutiny but the transmission was found by contact with the bodily fluids of infected animals and humans. By antibody dependent Enhancement mechanism (ADE) the virus first attacks the monocytes and macrophages followed by dendritic cells, endothelial cells and liver cells, attacking host's immune system.^[1]

General manifestations of the disease includes incubation period of 2-21 days beginning with headache, fatigue, pain in muscle, sore throat, rash vomiting, diarrhea and finally kidney and liver function failures with internal and external bleeding in rare cases. Amongst the oral manifestations gingival bleeding is commonest with white and red patches, oral ulcerations and odonophagia.^[1,2]

Dentist's concern in Ebola virus is like two sides of coin indicating victory and defeat. On one side giving blood for investigation during outbreaks has been found troublesome by patients and even find it as an invasive procedure, often refuse to give blood samples. In such situations dentist plays an important role by investigating through salivary samples as oral samples are safer, easier to collect, more comfortable to patients and does not clot like blood. On the other hand the commonest mode of spread is bodily fluids and saliva being one of them followed by blood, oral physician is of great risk in outbreak areas and in routine dental practice. Thus dentists should be more cautious and follow proper sterilization and disinfection protocol. Till today supportive treatment and following preventive measures is the best known management of Ebola infected patients. Blood pressure and body temperature should be within normal limits. Body electrolyte content should be maintained by continuous intravenous fluids. Oral symptoms are best managed by topical analgesics and anesthetic agents. Currently there is no approved vaccine for Ebola virus but ongoing research for vaccines is

under testing/trials on humans. As prevention is better than cure humans should avoid their contact with infected animals. Minimum or no contact should be made with infected people, sexual contact should be strictly avoided and blood or salivary samples handling should be done with proper care and hygiene.^[1,3,4]

As Ebola virus infection is life threatening disease, vaccines and medicines are yet not approved, its transmission through blood and saliva is a potential concern and is need of an hour for dentists.

REFERENCES

1. Singh RP, Tyagi N, Gupta S, Anthwal N. Ebola: A concern. Heal Talk, March-April 2016; 8(4).
2. Galvin S, Flint SR, Healy CM. Ebola virus Disease: review and implications for dentistry in Ireland. Journal of the Irish dental association, 2015; 61(3): 141-143.
3. Shanbagh V, Kumar L. The need of an hour for saliva diagnostic research in detection of Ebola virus disease. Community acquired infection, Jan-Mar 2015; 2(1).
4. Furmenty P, Leroy EM, Epelboin A et al. Detection of ebola virus in oral fluid specimen during outbreak of Ebola virus hemorrhagic fever in the Republic of Congo. Journal of clinical infectious diseases, 2006; 42(11): 1521-1526.