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Recent Developments in the Diagnosis of Rabies in Humans and Animals

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ABSTRACT

Zoonotic diseases constitute an important part of the global health programme of the World Health Organization. Rabies is a major viral anthropozoonosis, which infects humans, domestic and wild animals. The disease is reported from many countries of the world including Ethiopia and India. It is estimated that rabies is responsible for nearly 55,000 deaths mostly in children every year, and about 10 million people annually receive post-exposure treatments after being exposed to rabies suspected animals. Dog is the principal transmitter of rabies to humans as well as other animals, with 99 per cent of human rabies cases attributed to dog bite. The help of laboratory is imperative to confirm an unequivocal diagnosis of rabies. In recent years, new advances in the laboratory diagnosis of rabies have been reported. All the new techniques require validation before being routinely employed by public health laboratory for the diagnosis of rabies. Facility for rapid diagnosis, availability of vaccine, elimination of stray dogs, and compulsory vaccination of pet dogs, active surveillance and public awareness will certainly reduce the incidence of this dreaded disease. Further research on etiopathogenesis, aberrant course of disease and development of cheap, safe and potent inactivated cell culture vaccine is recommended.

Keywords: Anthropozoonosis, diagnosis, dog, rabies, vaccination