Abstract:

_Peste des petits ruminants_ (PPR) is currently considered as one of the main transboundary animal diseases that constitutes a threat to small ruminant production in many developing countries. It is a viral disease of sheep, goats and wild ruminants (Impala, Gazelles, Springbuck), with goats being more severely affected. The disease is caused by a Morbillivirus, _peste des petits ruminants_ virus (PPRV), that belongs to the family _Paramyxoviridae_. The disease causes high mortality and morbidities to the tune of 90 to 100% in endemic areas with high economic impact. It was estimated in the FAO-OIE Global eradication strategy report that the direct annual losses due to PPR are between USD 1.2 and 1.7 billion. This review is an attempt to summarize the recent advancement in PPRV specific clinical signs, diagnostic tests, vaccination and disease control strategies. Clinically, the disease is characterized by sudden dullness and fever, depression, anorexia, cutaneous nodules, severe purulent ocular and nasal discharges resulting in reddening of conjunctiva and matting of the eyelids, respiratory distress and coughing. The pathology caused by PPR is dominated by necrotizing and ulcerative lesions in the mouth and the gastro-intestinal tract. The recent molecular characterization of PPRV virus isolates subdivides them into four genetically distinct lineages (I, II, III and IV). Both viral isolation, molecular and serological tests are reliable tests to confirm presence of the disease. The virus is transmitted through close contact with an infected animal, although oral transmission is possible, through ingestion of contaminated feed and water. Separation of infected animals from healthy animals at the first stage can minimize the chance of transmission of the virus from infected to healthy animals. Advanced molecular techniques are more accurate to detect the timely diagnosis of the disease. Moreover, vaccination campaign will improve prevention of the disease.