

Q. Describe the etiology, pathogenesis, treatment and control of camel pox.

Camel pox is one of the most important viral diseases in East Africa and parts of South Asia. It is caused by *Orthopox cameli*. Its outbreaks mostly occur during early to middle periods of the rainy season. The disease is highly contagious, from one animal to another, but scabs, contaminated tools, cloth, grazing areas and human beings also serve as fomites. Camel pox is reported most often in young and immature camels. Recovered animals show a stable and lifelong immunity, but there is no cross protection with other types of pox virus, including contagious ecthyma being clinically similar. The main clinical symptoms are characteristic skin lesions, papules appear around nostrils and lips. These papules later on take the form of vesicles, which eventually rupture. There is fever and anorexia; mandibular lymph nodes are often enlarged. Facial oedema is quite common at this stage. The localized form of pox disappears in about 3 weeks. Clinical symptoms of generalized form are more severe. Affected animals show high temperature, severe depression and anorexia. Vesicles develop all over the body. The pox scabs become covered with a thick brown crust after some time. Severe secondary infections are common. Septicaemia, reduced feed intake and resultant general weakness can precipitate death of these animals.

In dry climates the disease cures itself. In wetter areas, the disease can be severe. Mortality in calves and immature camels is very high, especially under poor management conditions, but the effects of morbidity may be equally important because they cause heavy production losses, particularly in weight gain. Some traditional owners use a vaccine made from the mild form to prevent further spread of the disease. They take scabs from animals with low levels of infection and insert them in a wound (skin scarification) they make on the animal, which is to be protected from the disease. The Lister strain of vaccinia virus applied by skin scarification has been successfully used to control a severe outbreak in Bahrain. Along with a vaccination programme, improved management strategies could diminish the prevalence of the diseases. Further education of herd owners about the etiology of camel pox, strict separation of diseased and healthy young camels, improved health care including long acting antibiotics, improved

hygiene and general supportive treatment will decrease the harmful effects of camel pox (Schwartz and Dioli, 1992).