



CCPA Group

Delacon

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IFF

Interheat

LUBING

Nuclèus

Pathogenesis

Natural infection is by ingestion and initial viral replication occurs in the tonsils and intestinal tract, especially the large intestine and the ileum. Virulent strains then establish a viraemia which leads to infection of the central nervous system and pregnancies.

Clinical signs

Most teschovirus infections are subclinical but different clinical syndromes have been associated with different viral strains.

The most severe polioencephalomyelitis is encountered in Teschen disease and this affects pigs of all ages. The early signs of Teschen disease include fever, anorexia and listlessness followed by ataxia. In severe cases nystagmus, convulsions, opisthotonus and death occurs within a few days.

When paralysis ensues the pig may sit like a dog or remain in lateral recumbency. Loud noises may trigger off rapid uncoordinated limb movements or lateral recumbency.

Sometimes milder teschovirus strains may induce a milder polioencephalomyelitis with low morbidity and mortality mainly in young pigs and this form can progress into a complete paralysis.

The term SMEDI was introduced to describe a range of reproductive conditions (Stillbirths, Mummies, Embryonic Deaths and Infertility) that were subsequently shown to be caused by teschovirus. However, it is now known that other viruses, such as parvovirus, might be involved.

Porcine teschoviruses have also been isolated from the male reproductive tract.

The role of porcine teschovirus in scour is uncertain because this virus can also be isolated from healthy animals.

The role of porcine teschoviruses as respiratory pathogens is also unclear although experimentally some strains of the virus have produced a pericarditis or pneumonic lesions.

Lesions

No specific changes have been associated with intestinal infections. No gross lesions are seen in encephalomyelitis although histological lesions are seen throughout the central nervous system.

Diagnosis

Teschen disease is designated as a notifiable disease by the OIE who detail the diagnostic protocols to be followed. Clinical signs coupled to an encephalomyelitis is suggestive of the disease but final diagnosis requires viral isolation from the central nervous system.