Cysticercosis

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Nature of the disease

Porcine cystercosis is a parasitic zoonosis due to infestation by the cestode Taenia solium also known as Cysticercus cellulosae. It causes few symptoms in the animal but it is an important zoonosis.

Classification

OIE, List B disease

Susceptible species

The pig is a intermediate host and man is the final host.

Distribution

Porcine cysticercosis is worldwide distributed

Clinical signs

In case of massive infestation of animals clinical signs can include:

Post-mortem findings

Lesions consist of cysticerci in cysts, they are 5-8 mm by 3-5 mm, translucid and filled with a brownish to pinkish liquid, sometimes the 'head' of the metacestodes can be see as a white spot. Cysts are essentially found in the following muscles:

More rarely cysts are found in the lymph nodes, the liver, the spleen, the lungs and the brain.

Differential diagnosis

Lesions must be differentiated from sarcosporidiosis and toxoplasmosis.

Specimens required for diagnosis

The diagnosis is usually made during meat inspection. However serologic test has been developed.

Transmission

Pigs usually get infected by food or roaming in areas contaminated by human faeces (which can come from sewage water or direct pollution). Occasionally in-utero contamination occurs.

Human get infected by eating improperly cooked meat. Cysticysts are inactivated by cooking meat at 45 to 50°C for 15 to 20 minutes or if core temperature reaches 90°C.

Risk of introduction

Introduction could occur through importation of infected pigs, meat or material contaminated by human faeces. Humans can also introduce it into the country.

Control / vaccines

Control is done through public hygiene and proper meat inspection at slaughterhouse.

Cysts can be destroyed by freezing at -10°C for 4 days by cooking meat at 45 to 50°C for 15 to 20 minutes or if core temperature reaches 90°C.

References

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Yes