

Cysticercosis

### 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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2. Office International des Epizooties, 2002

 SOULSBY EJL, Helminths, Echinococcus In Helminths, Arthropods and Protozoa of Domesticated Animals, Lea and Febiger Inc, 7th ed, 1982, Philadelphia, p 111-113
The importation into New Zealand of Meat and Meat Products, Stuart C. McDiarmid, Wellington, 1991, p. 65-67

Yes