

Neurocysticercosis

Neurocysticercosis is an infection of the nervous system and commonly resulted by the ingestion of *Taenia solium* eggs (pork tapeworm) after consuming undercooked pork, or contaminated water. The parasite can grow in the brain and spinal cord resulting in severe headache, dizziness, seizures, stroke, neuropsychiatric dysfunction beside many other pathological manifestations.

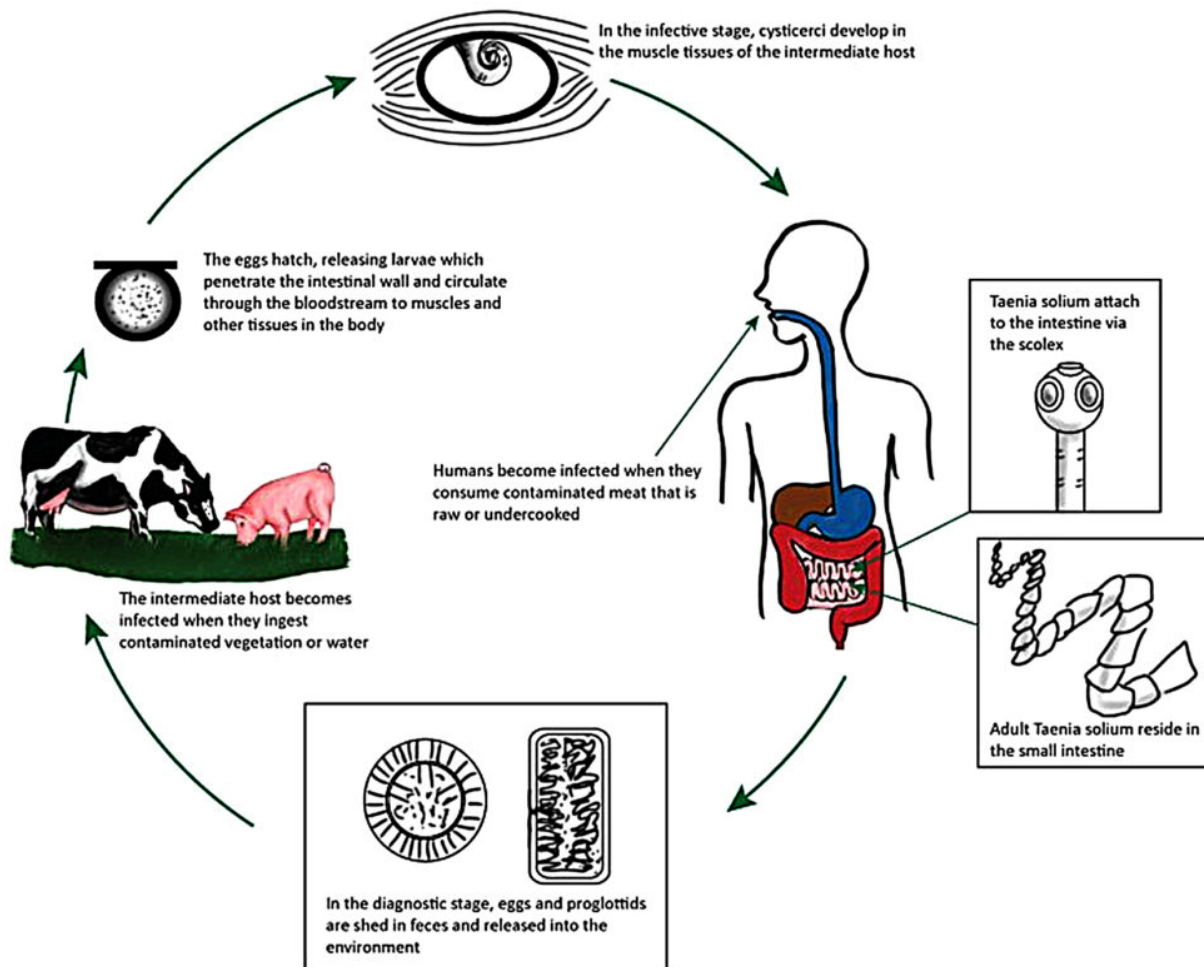


Fig. 1. Life cycle of *Taenia solium*.

Humans infected with adult tapeworms shed the eggs of the parasite in feces, which can contaminate water bodies or be ingested by an intermediate host, mostly pigs. The eggs hatch and release the larvae (cysticerci) into the intermediate host. The larvae penetrate the intestinal wall and spread through the blood stream to different tissues in the body. The cycle is complete when humans, the definitive host, ingest undercooked pork or untreated water containing the larvae.

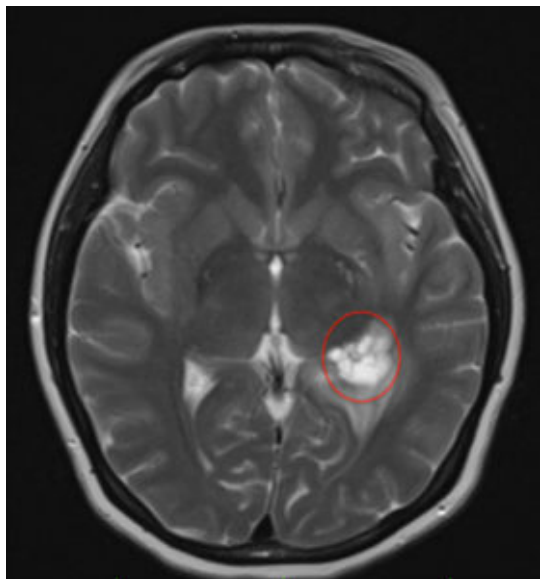


Fig. 2. Magnetic resonance scan of the patient's brain showing cystic lesion (encircled).

Once it gets into the human body, it attaches to the intestinal mucosa and grows to full length. The adult tapeworm releases cysticerci, which can disseminate to different parts of the body (Fig. 1). Cysticerci infection of tissues of the nervous system causes neurocysticercosis.

Due to immigration and international travel, neurocysticercosis cases are not uncommon in the United States. It can be diagnosed with computed tomography and magnetic resonance imaging of the brain. The treatment of the neurocysticercosis including cysticidal drugs (e.g., albendazole and praziquantel), and neurosurgical procedure, depending upon the situation. A patient of South Asian origin came to our clinic with complaints of dizziness, headaches and episodes of seizures for the past twelve years without proper diagnosis. The magnetic resonance imaging without contrast indicated multilobulated cystic mass in the brain with suspicion of neurocysticercosis (Fig. 2).

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