



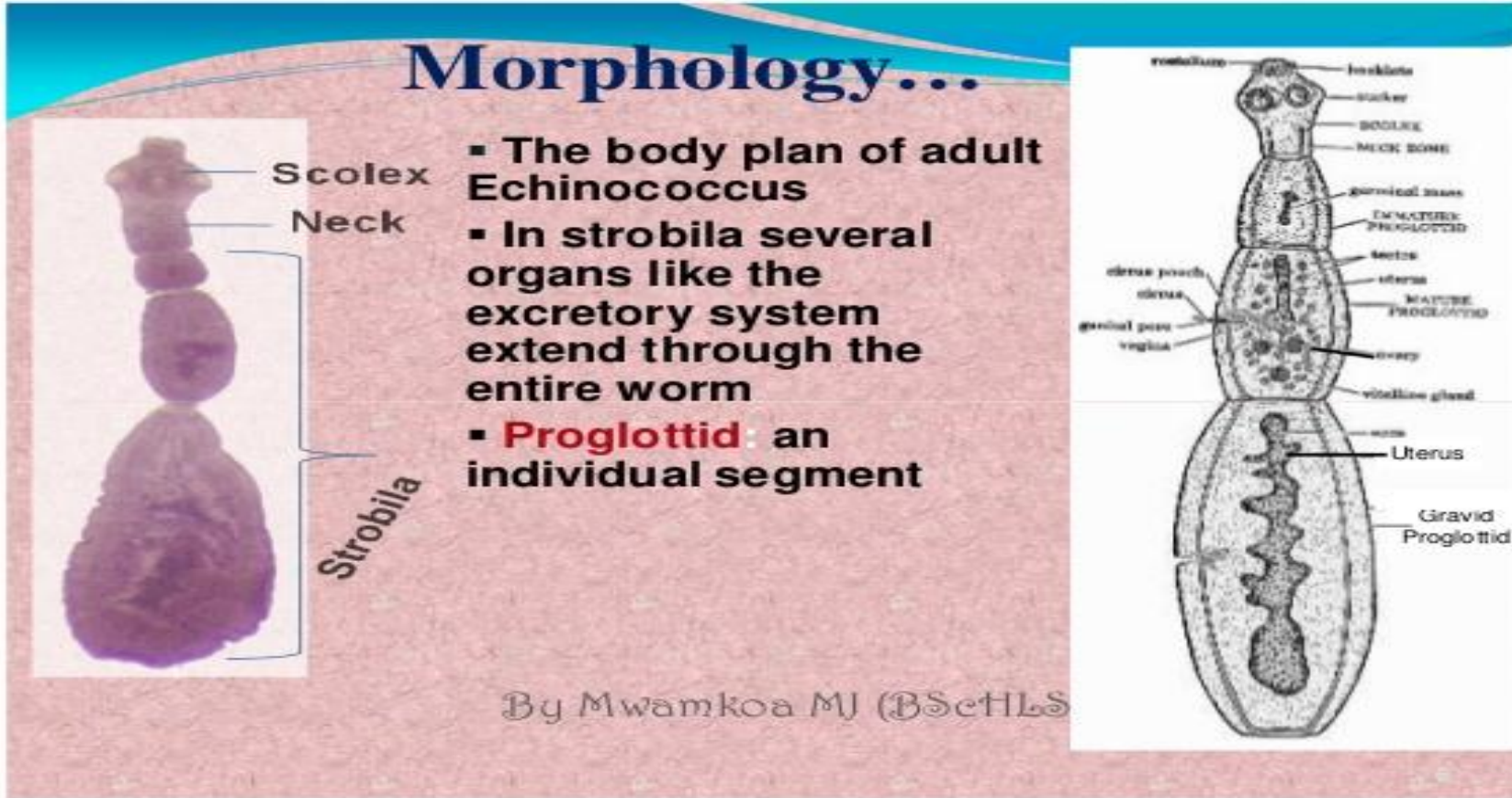
Echinococcus granulosus

- Also called the hydatid worm, hyper tape-worm or dog tapeworm,
- cyclophyllid cestode that parasitizes the small intestine of canids as an adult, but which has important intermediate hosts such as livestock and humans.
- Cystic echinococcosis is globally distributed
- The highest prevalence is found in rural areas where older animals are slaughtered.

Morphology

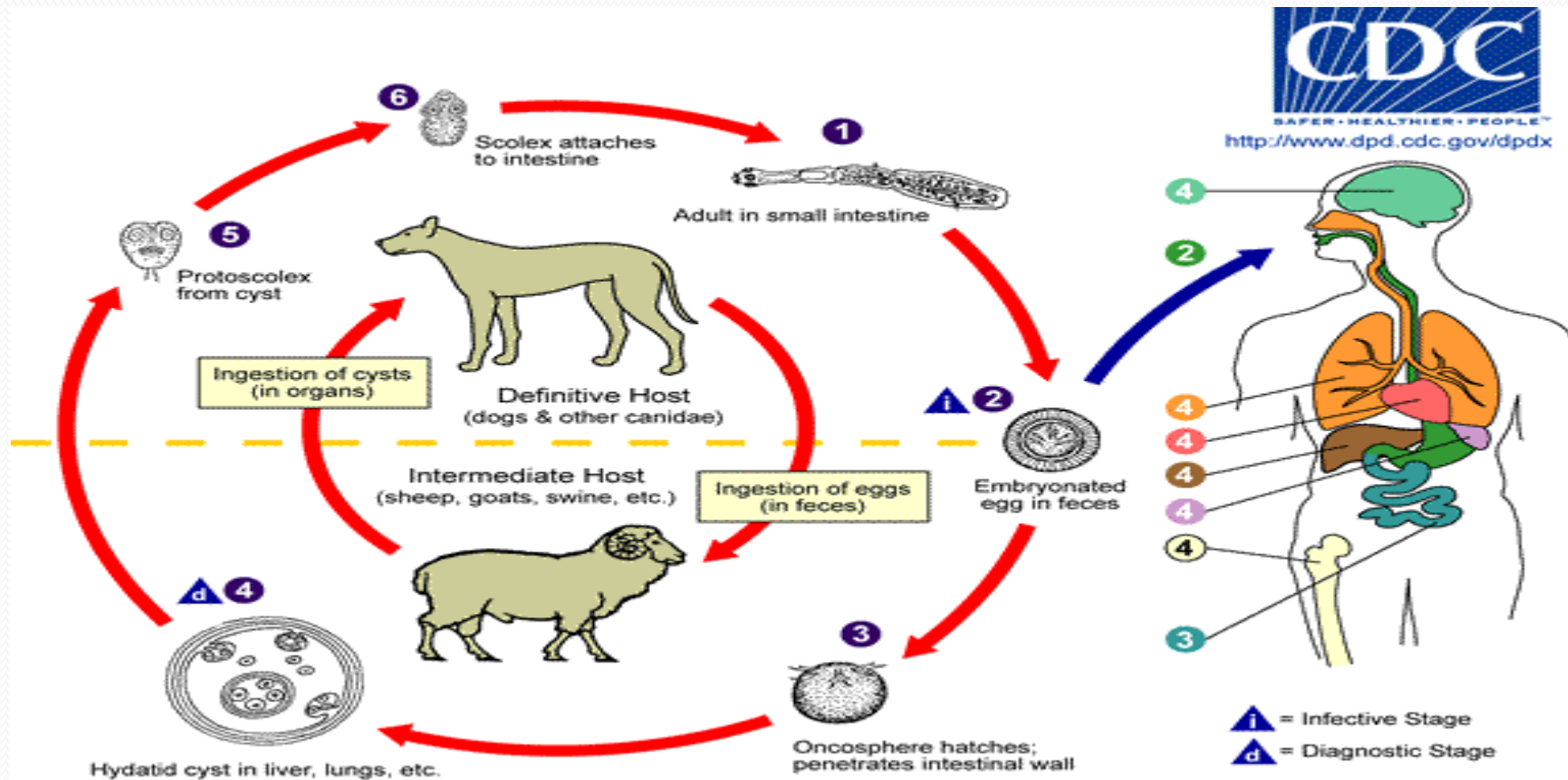
- The adult tapeworm ranges in length from 3 mm to 6 mm and has three proglottids (segments) when intact:
- An immature proglottid,
- Mature proglottid,
- A gravid proglottid.

Morphology...



<https://www.google.com/search?q=ECHINOCOCCUS+morphology&tbm=isch&ved=2ahUKEwiQsbu>

Life cycle



<https://www.google.com/search?q=ECHINOCOCCUS&sxsr=ALeKk03MHjyT2RQjfnkwBK9bCyMipRHebA>

Transmission

- The definitive host of this parasite are **dogs** and the intermediate host are most commonly sheep, however, cattle, horses, pigs, goats, and camels are also potential intermediate hosts.
- Humans can also be an intermediate host.

- *E. granulosus* is ingested and attaches to the mucosa of the intestines in the definitive host and there the parasite will grow into the adult stages.
- Adult *E. granulosus* release eggs within the intestine which will be transported out of the body via feces.
- When contaminated waste is excreted into the environment, intermediate host has the potential to contract the parasite by grazing in contaminated pasture, perpetuating the cycle.
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Diagnosis

- Diagnosis in the definitive host, the dog, may be done by post mortem examination of the small intestine, or with some difficulty ante mortem by purging with arecoline hydrobromate.
- ELISA is very useful

Alveolar echinococcosis

- Alveolar echinococcosis is characterized by an asymptomatic incubation period of 5–15 years and the slow development of a primary tumour-like lesion which is usually located in the liver.
- Clinical signs include weight loss, abdominal pain, general malaise and signs of hepatic failure.

Prevention

- Dogs should be vaccinated
- In the case of intermediate hosts, especially sheep, these vaccinations do cause an antigenic response, however it does not prevent infection in the host.
- Clean slaughter and high surveillance of potential intermediate host during slaughter is key in preventing the spread this cestode to its definitive host