

Pathogenic Intestinal Cestodes - Tape worms

	Common Name	Eggs	Worms	Endemic Areas	Host & Transmisison	Infection & Symptoms	Diagnosis
Hymenolepis nana	dwarf tapeworm	colorless shell, filaments emerge from polar thickening, 3 pairs of hooklets, Hexacanth embryo	scolex & proglottids; 2.5-4.0 cm	worldwide - tropics & subtropics; children & people living in close quarters	definitive - mice & rats; transport - fleas & beetles; ingestion of eggs, assoc. with contaminated sacks of grain by mice or rat feces	asymptomatic or intestinal enteritis & anorexia; autoreinfection-eggs hatch in GI tract	eggs in feces
Taenia saginata	beef tapeworm	35-45µm	in small intestine; 5-10 meters, unarmed scolex w/4 suckers & no hooks, gravid proglottid w/15-30 uterine branches	worldwide; Southeastern US - beef eating countries	definitive- humans only; ingestion of undercooked meat w/cysticercus larvae	asymptomatic or ab pain & diarrhea, moderate eosinophilia	proglottids or eggs in feces

<p>Taenia solium</p>	<p>pork tapeworm</p>	<p>hexacanth embryo, radial striations on yellow-brown embryophore, 3 pair of hooklets</p>	<p>in small intestine; 2-8 meters, armed scolex w/4suckers & central crown of hooks, gravid proglottid w/7-12 uterine branches</p>	<p>worldwide; less common in US</p>	<p>ingestion of T. solium embryonated eggs or gravid proglottids</p>	<p>T. solium Cysticercosis (Mexico & Central America)- humans accidental intermediate host, larvae migrate to eye, muscle, brain, nervous tissue (neurocysticercosis), form cysticercus bladders; headache, vomiting, epilepsy, obstructive hydrocephalus in 25% NCC</p>	<p>biopsy for cysticercosis; CT scan or MRI; serology: ELISA, indirect hemagglut.</p>
-----------------------------	----------------------	--	--	-------------------------------------	--	---	---

Pathogenic Intestinal Cestodes - Tapeworms

	Common Name	Eggs	Worms	Endemic Areas	Host & Transmisison	Infection & Symptoms	Diagnosis
Diphyllobothrium latum	broadfish tapeworm	75x45µm, operculum, terminal knob, coracodium-underdeveloped embryo	2-10 meter, scolex w/2 grooved suckers on each side, gravid proglottid w/rosette shaped uterus	worldwide - temperate regions - freshwater; cultures & climates where raw fish are eaten	ingestion of infective pleurocercoid larva in raw or undercooked freshwater fish	ab pain, weight loss, weakness, intestinal obstruction & B12 deficiency; one adult worm present	ID of eggs of evacuated proglottids & scolices in feces
Hymenolepis diminuta	rat tapeworm			worldwide	normal- rat; ingestion of cysticercoid larva from infected flea or grain beetle (intermediate)		eggs in feces
Dipylidium caninum	dog tapeworm			worldwide	normal- dog or cat; ingestion of cysticercoid larva from infected dog or cat flea (intermediate)	mild intestinal disease - worms lost spontaneously	egg packets or proglottids in feces

Pathogenic Tissue Cestode - Tape worms

	Common Name	Eggs	Worms	Endemic Areas	Host & Transmisison	Infection & Symptoms	Diagnosis
Echinococcus granulosus	hydatid tapeworm	Hydatid cyst- hydatid sand- scolices & free hooks in fluid, broad capsule, daughter cysts, inner layers- germinal tissue	3-6 mm		definitive- dog tapeworm; cosmopolitan distribution- inf in sheep-raising areas w/herd dogs; ingestion of eggs- close contact w/infected dogs, sheep or other herbivore	hydatid disease; due to enlarging cyst pressure- necrosis of surrounding tissues, eosinophilia, urticaria, bronchospasm; lung- coughing, shortness of breath, chest pain; liver- jaundice or portal hypertension; cyst growth or rupture can result in anaphalactic shock or death	hydatid cyst in lung, liver or other organs - scolices, brood capsules, hydatid sand or daughter cysts in hydatid cyst fluid (biopsy)