

Lecturer : Nerran K.F.AL- Rubaey
Practical parasites
Lab - 12 -

TREMATODES

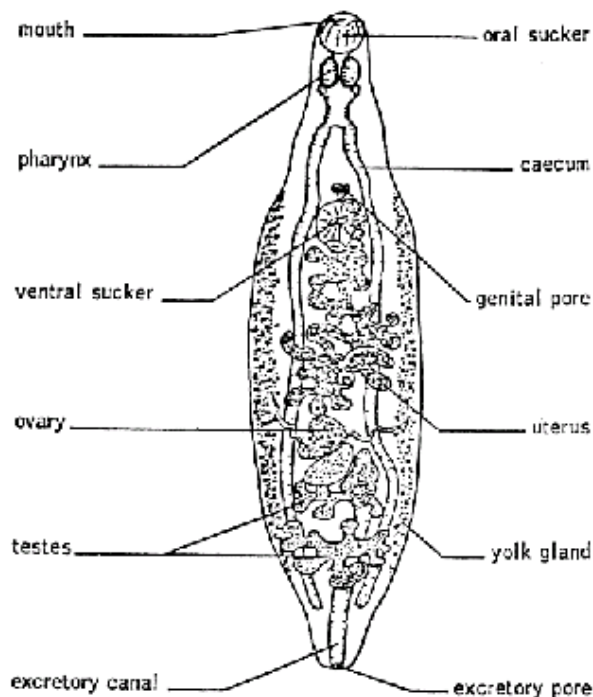
Liver Species

Clonorchis sinensis : common name (Chinese liver fluke)

Family : Obisthorchiidae

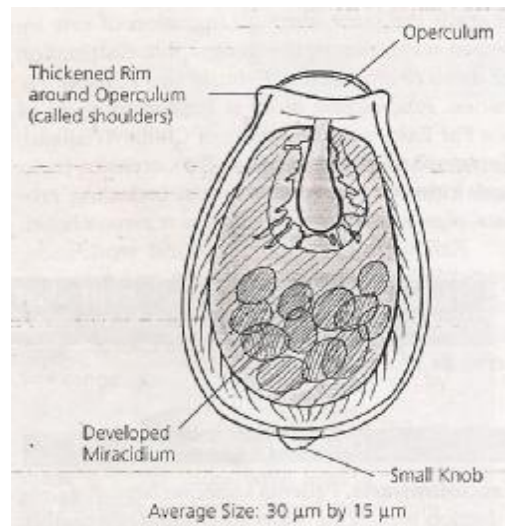
Adults :

The mature lives in bile passage . The worms are lanceolate , flat , transparent and pinkish in the living condition . The cuticle is smooth . At the anterior tip there is oral sucker , and at about one fifth body length posteriorly there is a smaller ventral sucker . each end of the adult worm narrower than midportion of the body .



Eggs :

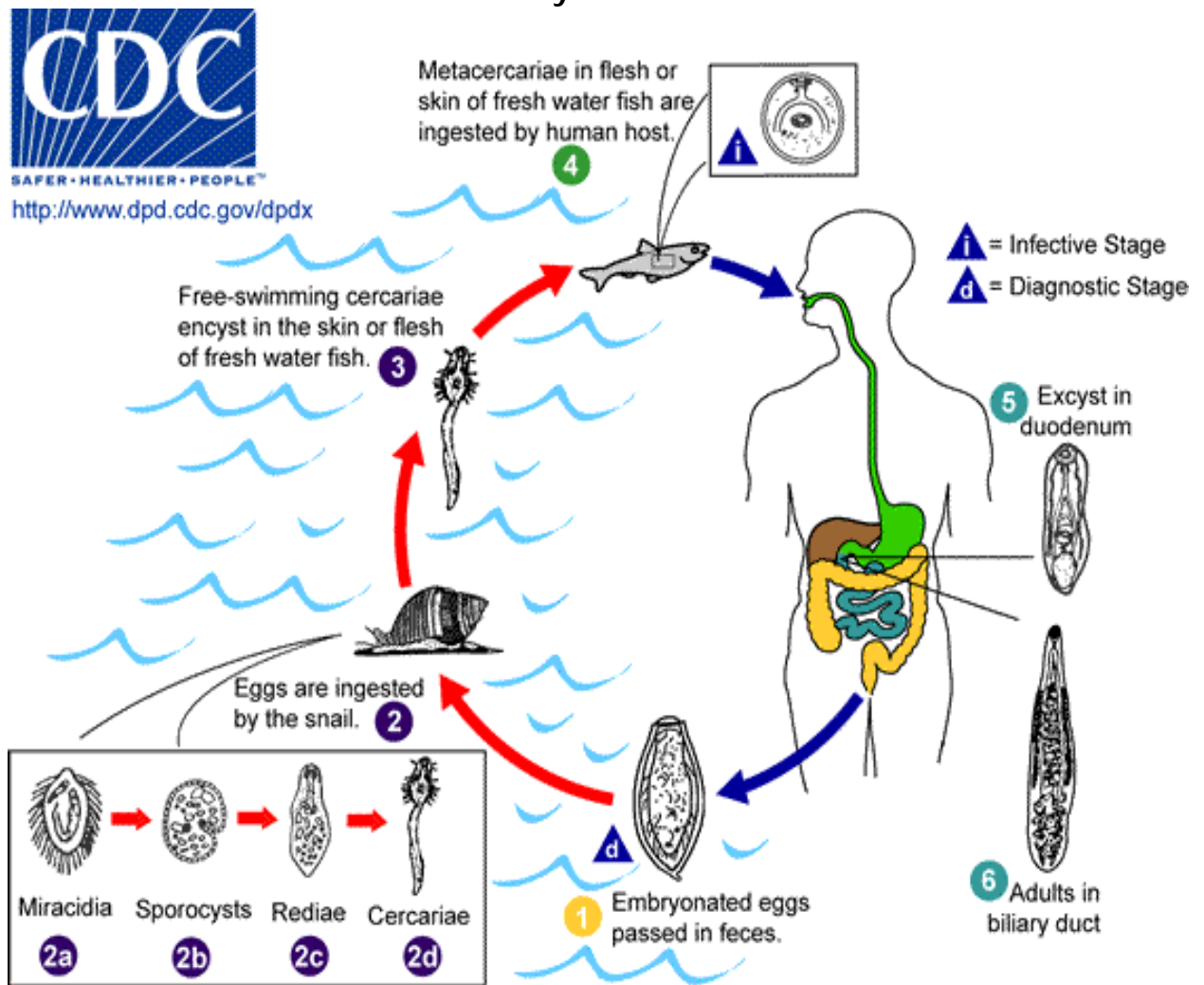
Are broadly ovoid , have thick , light yellowish brown shell with a distinct convex operculum opposite a small knob . A thick rim is located around the operculum and is referred to as shoulders . The developed miracidium consumes the interior of the egg . Eggs are fully embryonated when discharge in the feces .



Laboratory Diagnosis :

By recovery of the characteristic eggs from stool specimens or duodenal aspirates . The enterotest may also be performed . They rarely encountered adult worms are only seen when removed during a surgery or autopsy procedure .

Life Cycle



Pulmonary fluke (Lung species)

Paragonimus westermani : common name(oriental lung fluke)

Family : Paragonimidae (Troglotrematidae)

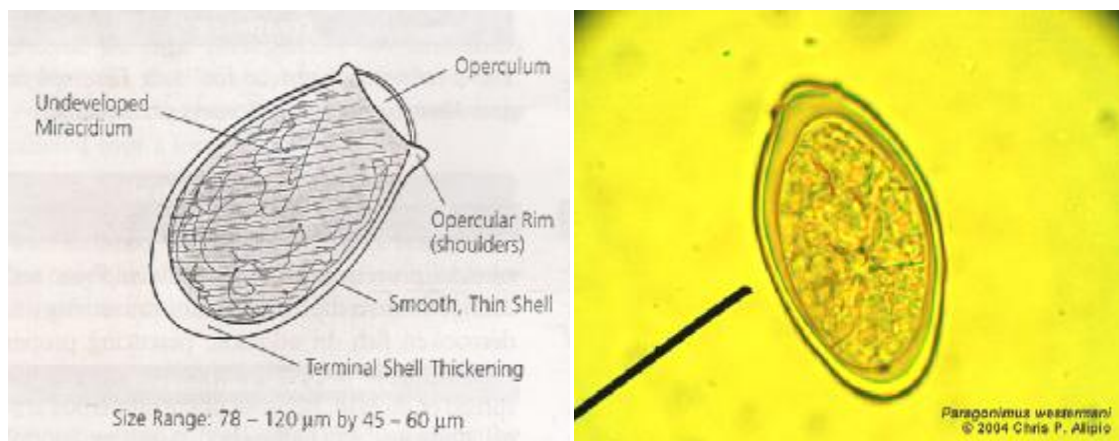
Adults :

The adult fluke lives in a fibrous capsule in the lungs , but it may also develop in other soft tissues of the body . This worm is red to brown colored . The cuticle possesses spines . The oral sucker and ventral sucker are subequal in diameter .



Eggs :

Oval egg consists of an undeveloped miracidium protected by a thin , smooth shell . An opercular rim (shoulders) surrounds the prominent operculum . An obvious terminal shell thickening is located on the end opposite the operculum .



Laboratory Diagnosis :

By the recovery of eggs in sputum specimens . Such eggs are commonly found in bloody samples . Occasionally the eggs may be seen in stool samples . Serologic tests have also been developed .