

Ascaris-As pathogwnic helminth (part-2)



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Ascaris-As pathogenic helminth



Transmission :

- Lumbricoides is transmitted primarily through faecal-oral contamination.
- The transmission can occur by ingesting contaminated soil, water, or food (raw vegetables or fruits) containing eggs with infective second stage rhabditoid larva.
- Usually, ascariasis is caused by directly or indirectly eating soil contaminated with feces carrying these eggs.

Ascaris-As pathogenic helminth



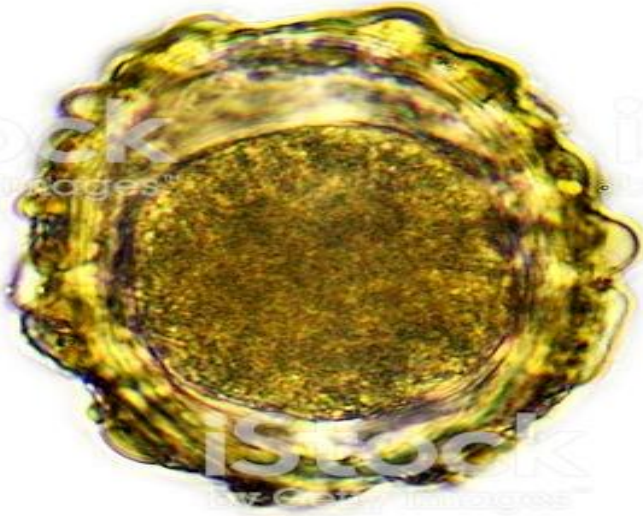
Transmission (contd..) :

- These eggs mature in the body, and adult female worms can then lay eggs that come out in the feces.
- however, that in order for the eggs to be infective , the feces must have been infected 2-4 weeks before it is ingested.
- Infection with Ascaris eggs is so common because the eggs are frequently found in the environment due to poor sanitation practices.

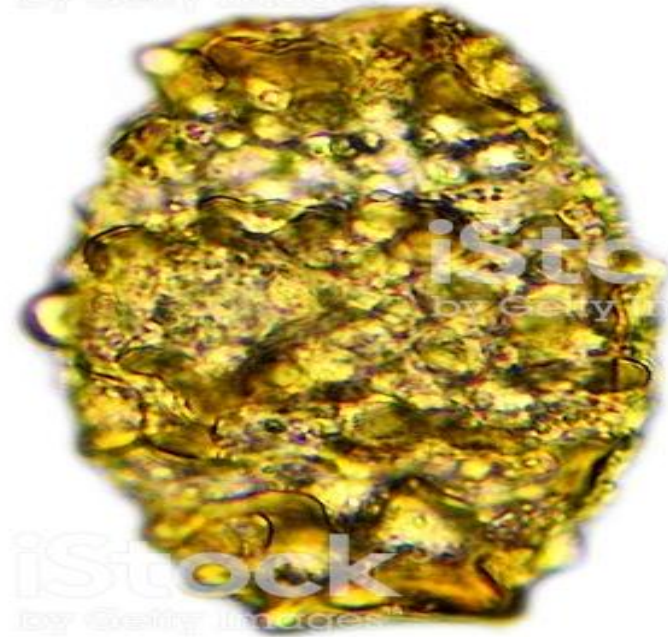
Ascaris-As pathogenic helminth



***Ascaris lumbricoides* (Eggs)**



Fertilised egg



Unfertilised egg

Fasciola- As pathogenic helminth



Life cycle:

Adult worms live in the lumen of the small intestine where copulation and fertilization takes place.

A female may produce approximately 200,000 eggs per day, which are passed with the faeces.

. Unfertilized eggs may be ingested but are not infective.

Fasciola- As pathogenic helminth



- **Life cycle (contd----)**

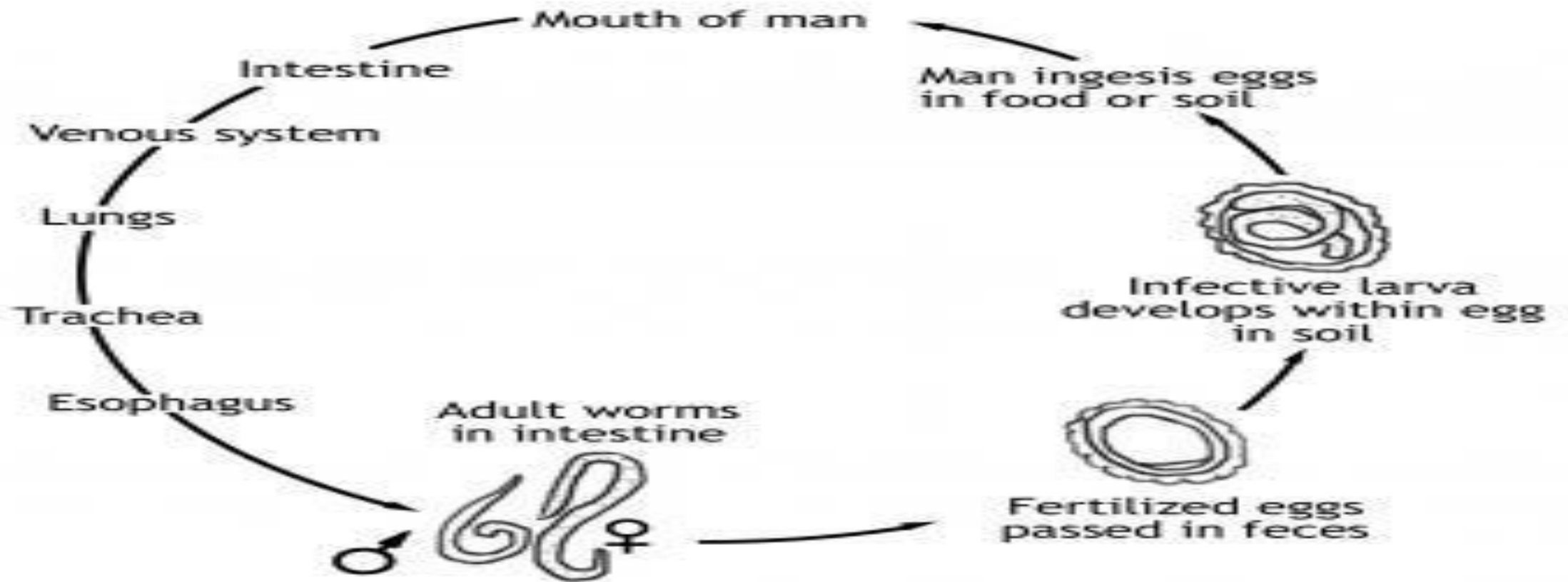
- Fertile eggs embryonate and become infective after 18 days to several weeks , depending on the environmental conditions (optimum: moist, warm, shaded soil).
- After infective eggs are swallowed , the larvae hatch , invade the intestinal mucosa, and are carried via the portal, then systemic circulation to the lungs.

Fasciola- As pathogenic helminth



- **Life cycle(contd---)**
- The larvae mature further in the lungs (10 to 14 days), penetrate the alveolar walls, ascend the bronchial tree to the throat, and are swallowed,
- Upon reaching the small intestine ,they develop into adult worms; between 2 and 3 months.
- Adult worms can live 1 to 2 years, and continue the life cycle.

Life cycle of escharis



Thank You

