

*Trichuris trichiura*  
and  
*Strongyloides*

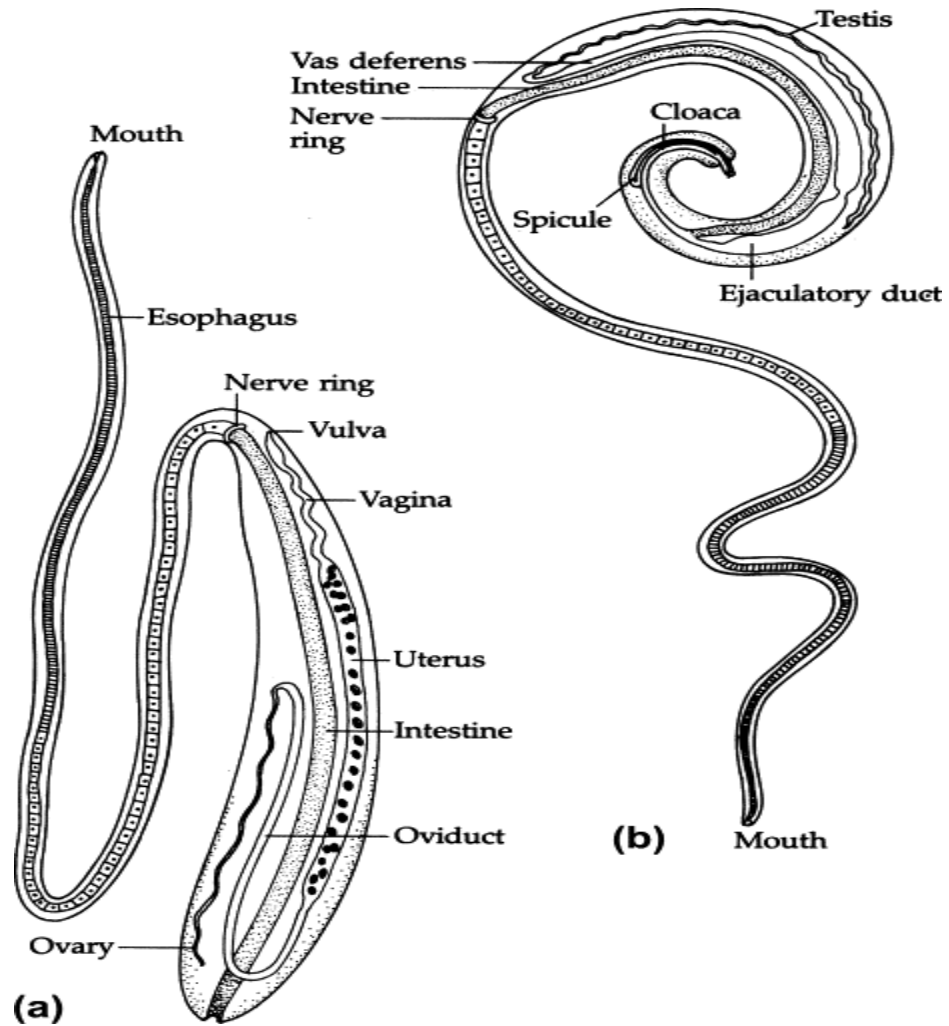
# *Trichuris trichiura*

- Whip worm infection
- Linnaeus discovered in 1771
- Occurs worldwide (in moist climates with poor sanitation)
- Inhabits large intestine of man
- **Barrel shaped** eggs
- Eggs survive for years

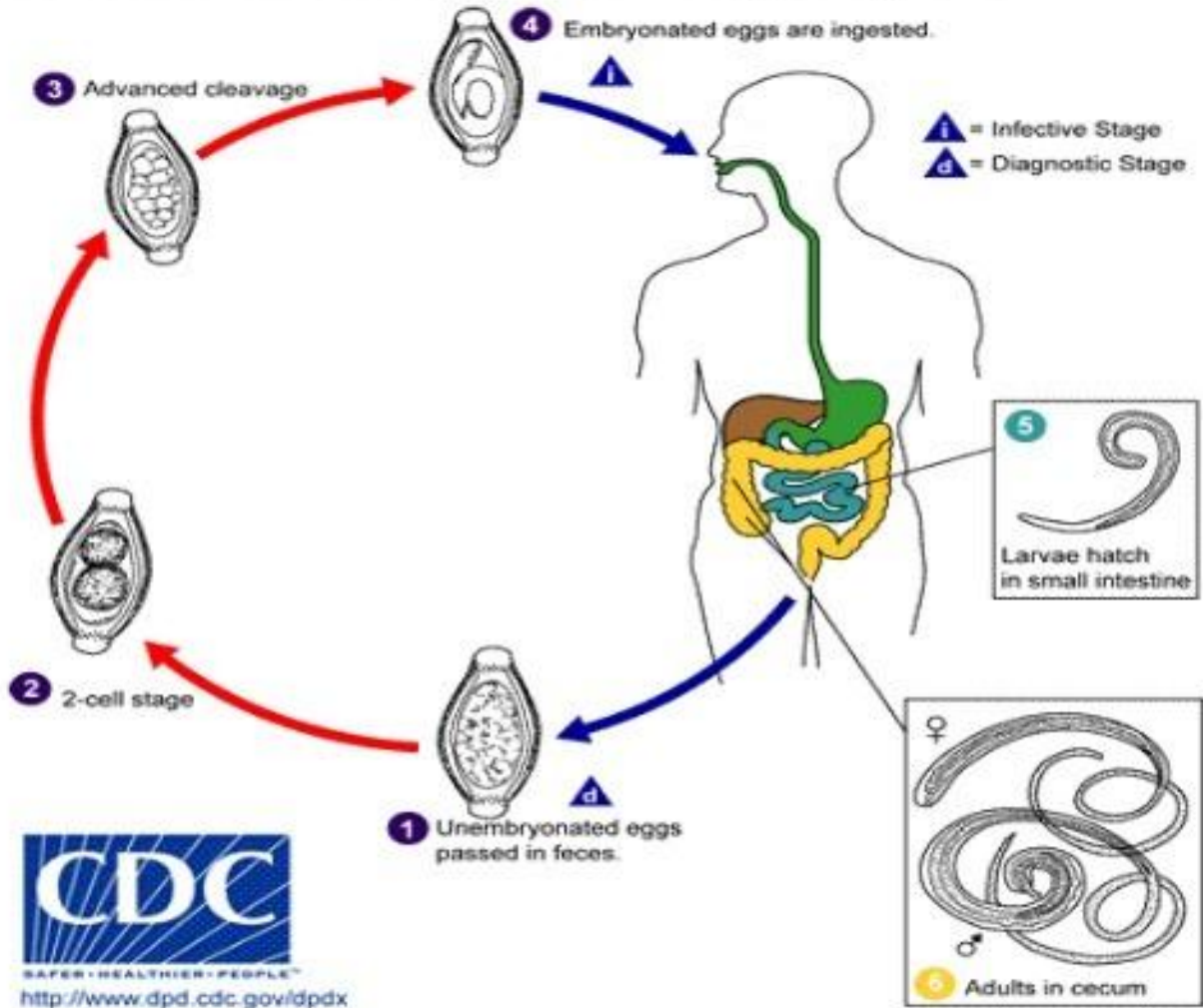


<https://www.google.com/search?q=%E2%80%A2%09Trichuris+trichiura+egg+shape>

# Morphology



# *Trichuris trichiura* – life cycle



<https://www.google.com/search?q=%E2%80%A2%09Trichuris+trichiura+life+cycle&tbm=isch&v>

## Clinical manifestations

- ❏ **Light infestations** are frequently asymptomatic.
- ❏ Heavy infestations may have **bloody diarrhea**.
- ❏ Long-standing blood loss may lead to **iron-deficiency anemia**.
- ❏ **Rectal prolapse** is possible in severe cases.
- ❏ **Vitamin A deficiency** may also result due to infection.
- ❏ **Mechanical damage** to the mucosa may occur as well as toxic or inflammatory damage to the intestines of the host.
- ❏ **Finger clubbing**

# Diagnosis

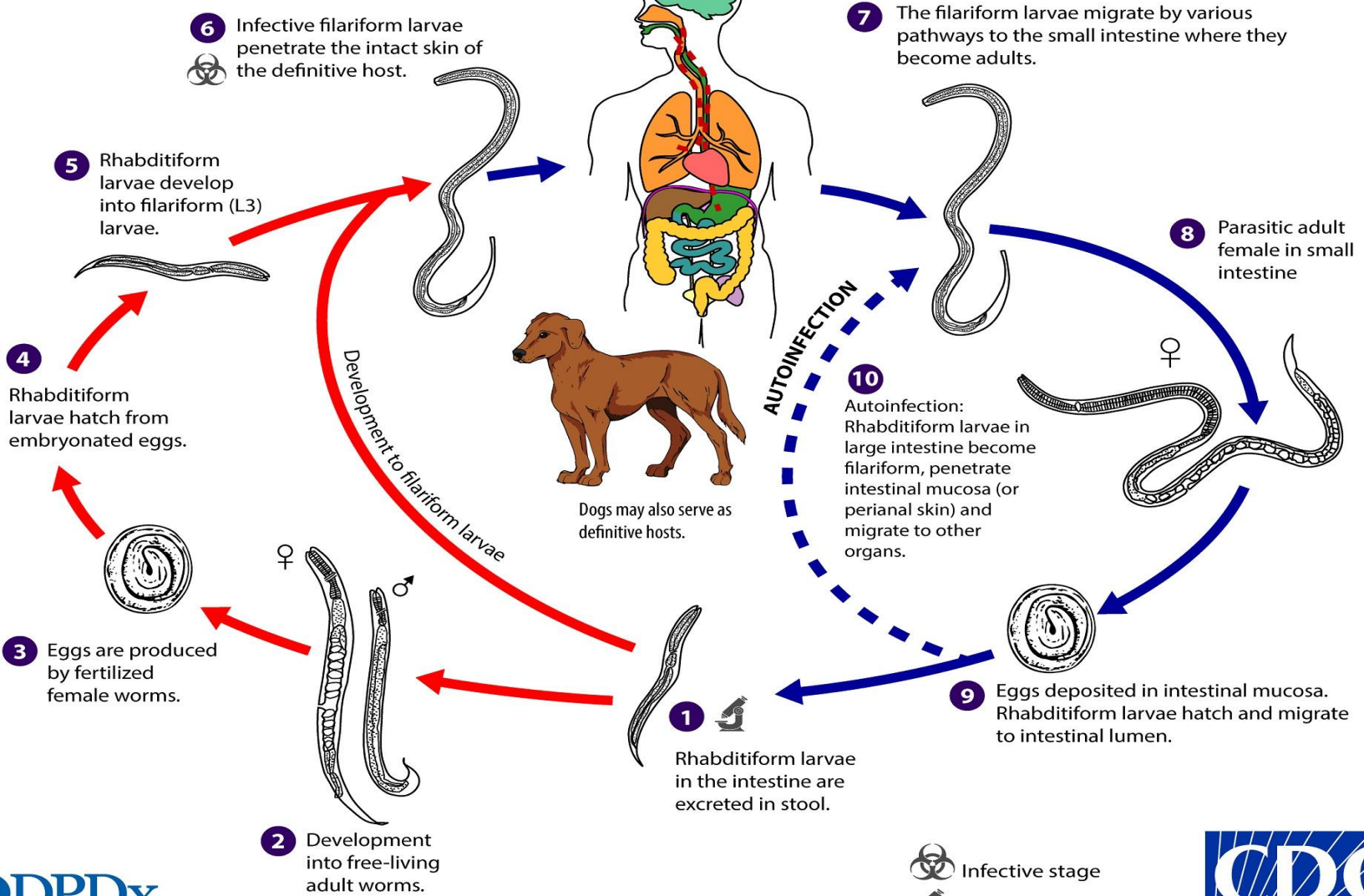
- Eosinophilia
- Stool examination
- Sigmoidoscopy
  
- **Prophylaxis:**
- Sanitary disposal of feces
- Solution of chlorpicrin will kill the eggs in soil
- not consuming the raw and uncooked fruits and vegetables

# Strongyloidiasis

# Strongyloides stercoralis

## Free-Living Cycle

## Parasitic Cycle





# Strongyloides stercoralis

## Clinical manifestation:

- - Light infections: asymptomatic.
- - Skin penetration: itching and red blotches.
- - During migration :

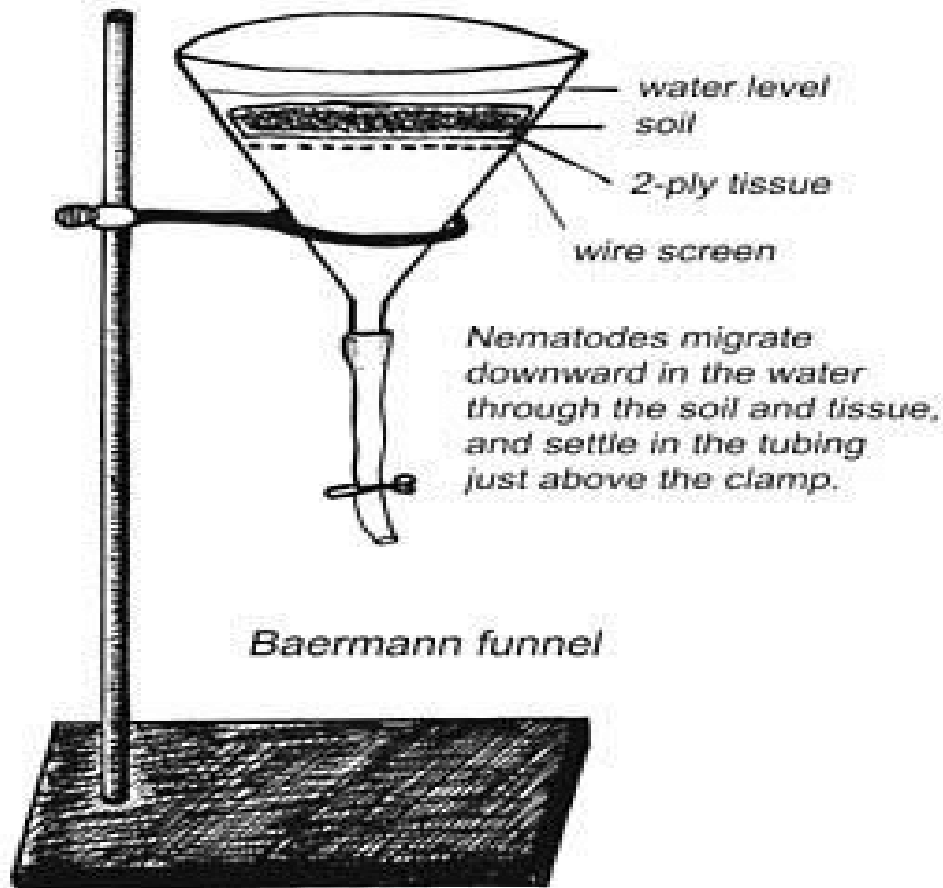
**In lungs** - bronchial verminous pneumonia, acute pulmonary eosinophilia (Loeffler's syndrome).

**In the duodenum** - burning mid-epigastric pain, tenderness, nausea and vomiting. Diarrhea and constipation may alternate, malabsorption.

## Laboratory diagnosis:

- Larvoscopy in faeces - the presence of free rhabditiform larvae in the faeces is diagnostic. Culture of stool for 24 hours will produce filariform larvae.
- Immunological (serological) tests.
- **Prevention**: proper disposal of faeces; personal hygiene; using of footwear in endemic areas

# Baermann's Apparatus



<https://www.google.com/search?q=%E2%80%A2%09baermann+apparatus&tbm=isch&ved>