

Enterobiasis

SALMA.A

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CONTENT

1. Introduction

2. Transmission

3. Clinical Features

4. Laboratory Diagnosis

5. Treatment

- ***Enterobiasis is a common parasitic infection in children***
- ***Causative organism : *Enterobius vermicularis* [a large intestinal nematode]***
- ***It is also called as pinworm or threadworm infection (as the adult worm of Enterobius is small, white, and thread-like)***

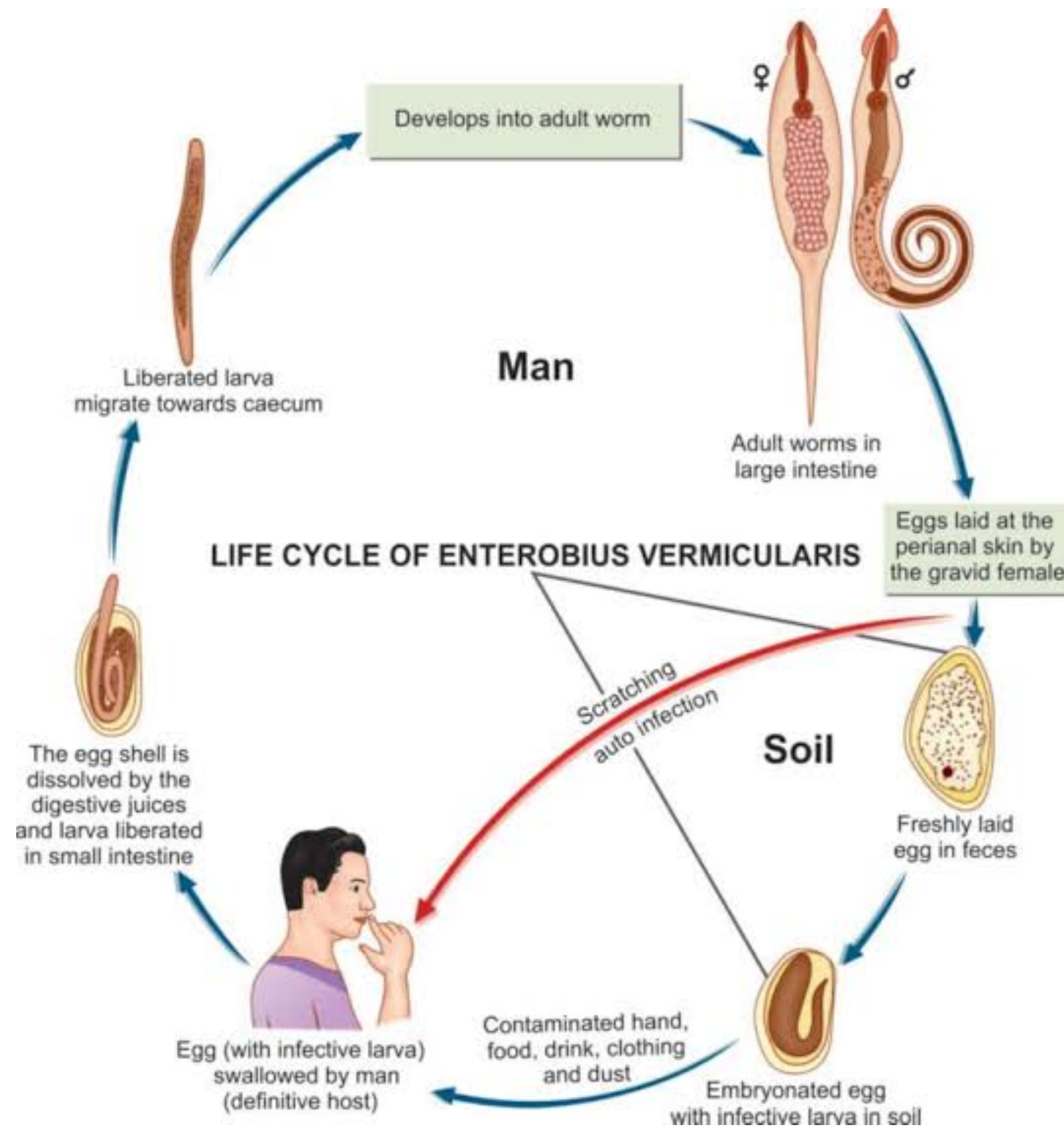
LIFE CYCLE

Host : Humans

Infective Form : Embryonated eggs carrying L2 larvae

Mode of transmission :

- 1. Through ingestion of eggs in the environment (eg. surfaces, clothes, bed linens, etc.) through contaminated fingers.***
- 2. By Autoinfection : It is of two types ;***
 - A. **Exogenous autoinfection** : by transferring eggs to the mouth with hands that have scratched the perineal area .***
 - B. **Endogenous autoinfection** : by retrograde migration of the larvae hatched from the eggs in the perianal skin.***



CLINICAL FEATURES

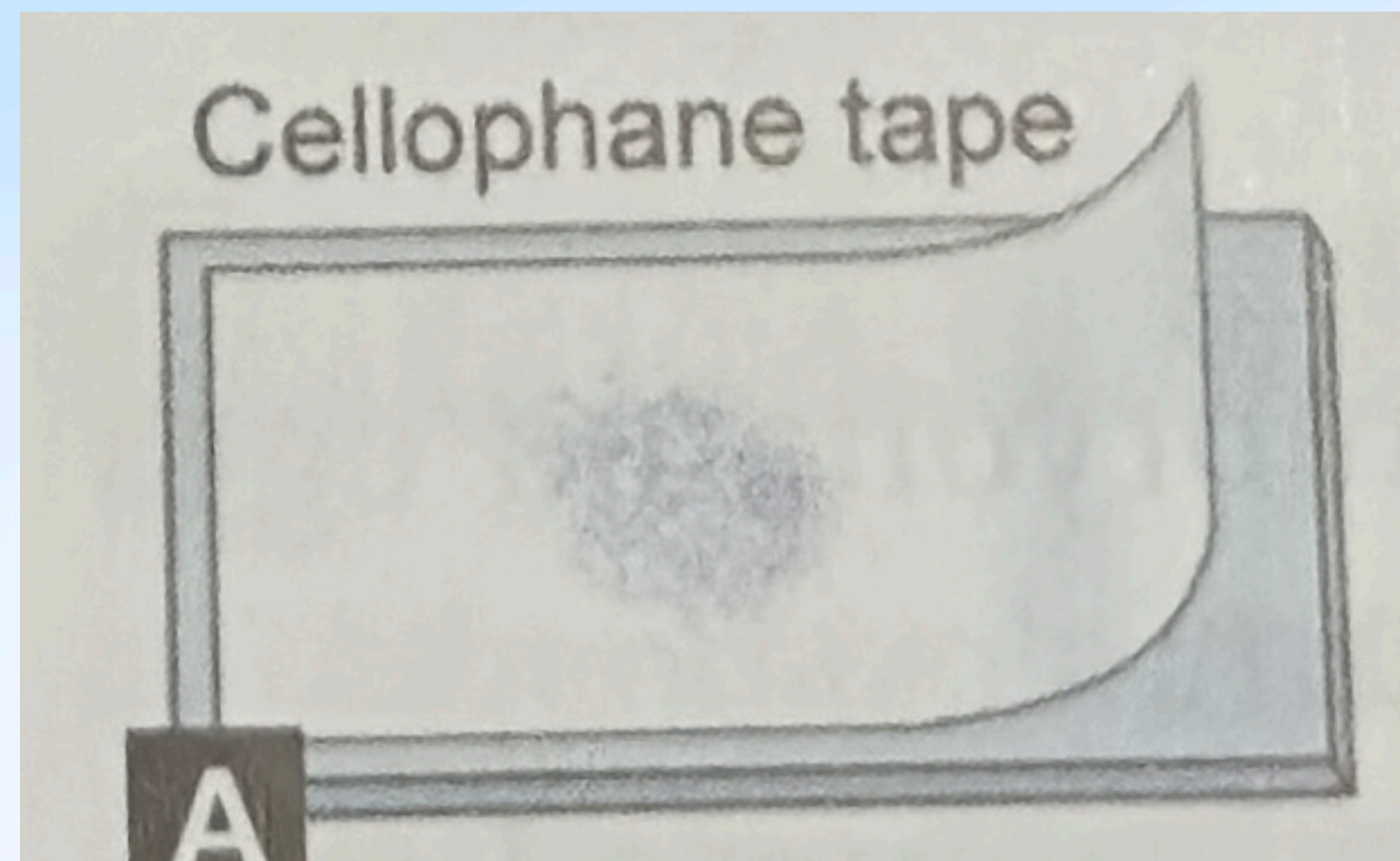
- ***Children are commonly affected.***
- ***The most cardinal symptom is **perianal pruritus**, which often gets worse at night as a result of the nocturnal migration of the female worm.***
- ***Abdominal pain and weight loss (may be seen in heavy infections)***
- ***Rarely, pinworms invade the female genital tract, causing vulvovaginitis and pelvic or peritoneal granulomas.***



LABORATORY DIAGNOSIS

- ***Microscopy of the perianal skin samples is the test of choice to detect characteristic eggs.***
- ***Specimen is collected by two methods :-***
 - 1.Cellophane tape***
 - 2.NIH swab (developed by National Institute of Health, USA)***

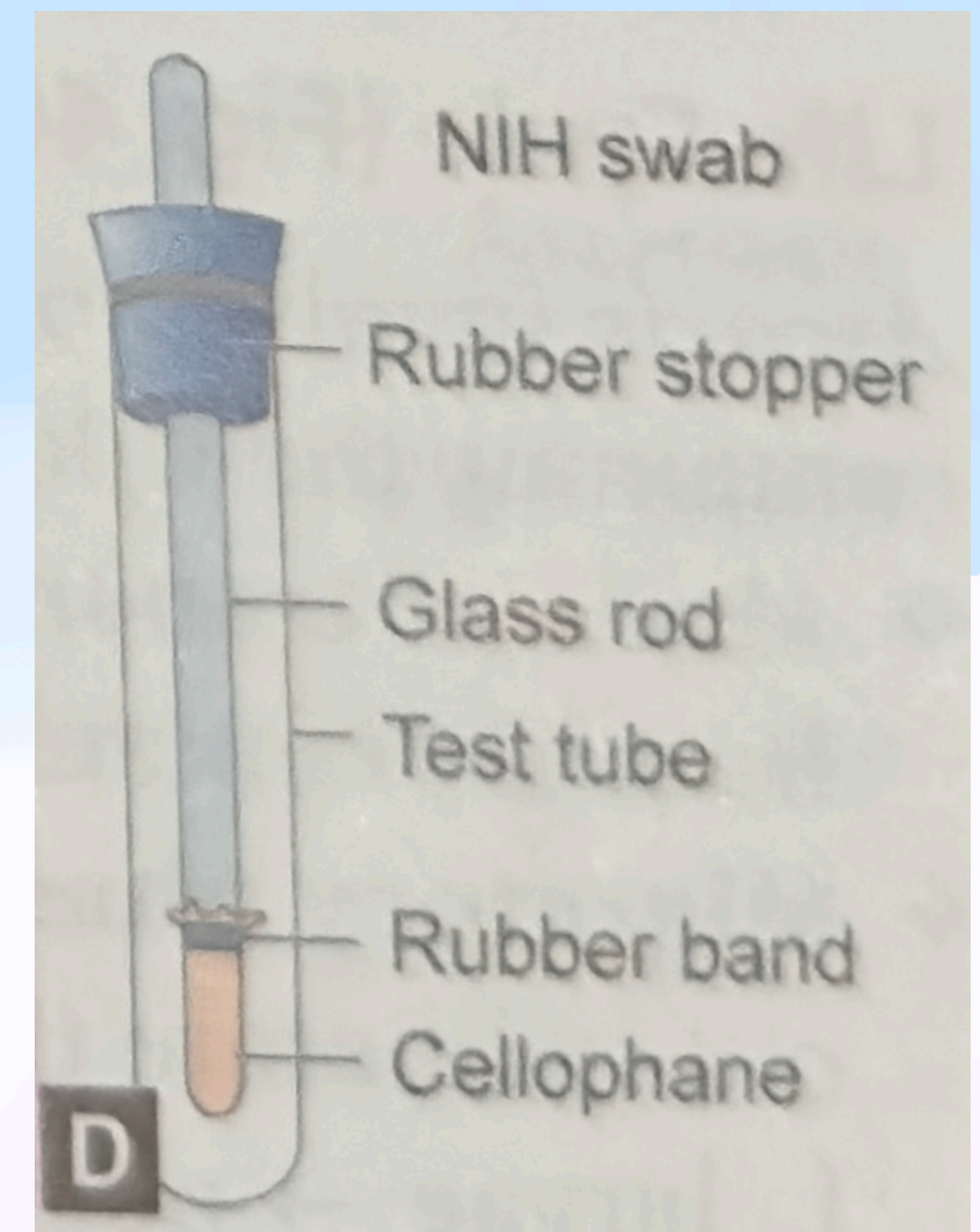
1. ***Cellophane tape*** : ***It is applied onto the perianal region and then the tape is mounted with a drop of saline on a clear glass slide***



2. **NIH swab** : It consists of a glass rod attached to a cellophane tape by a rubber band.

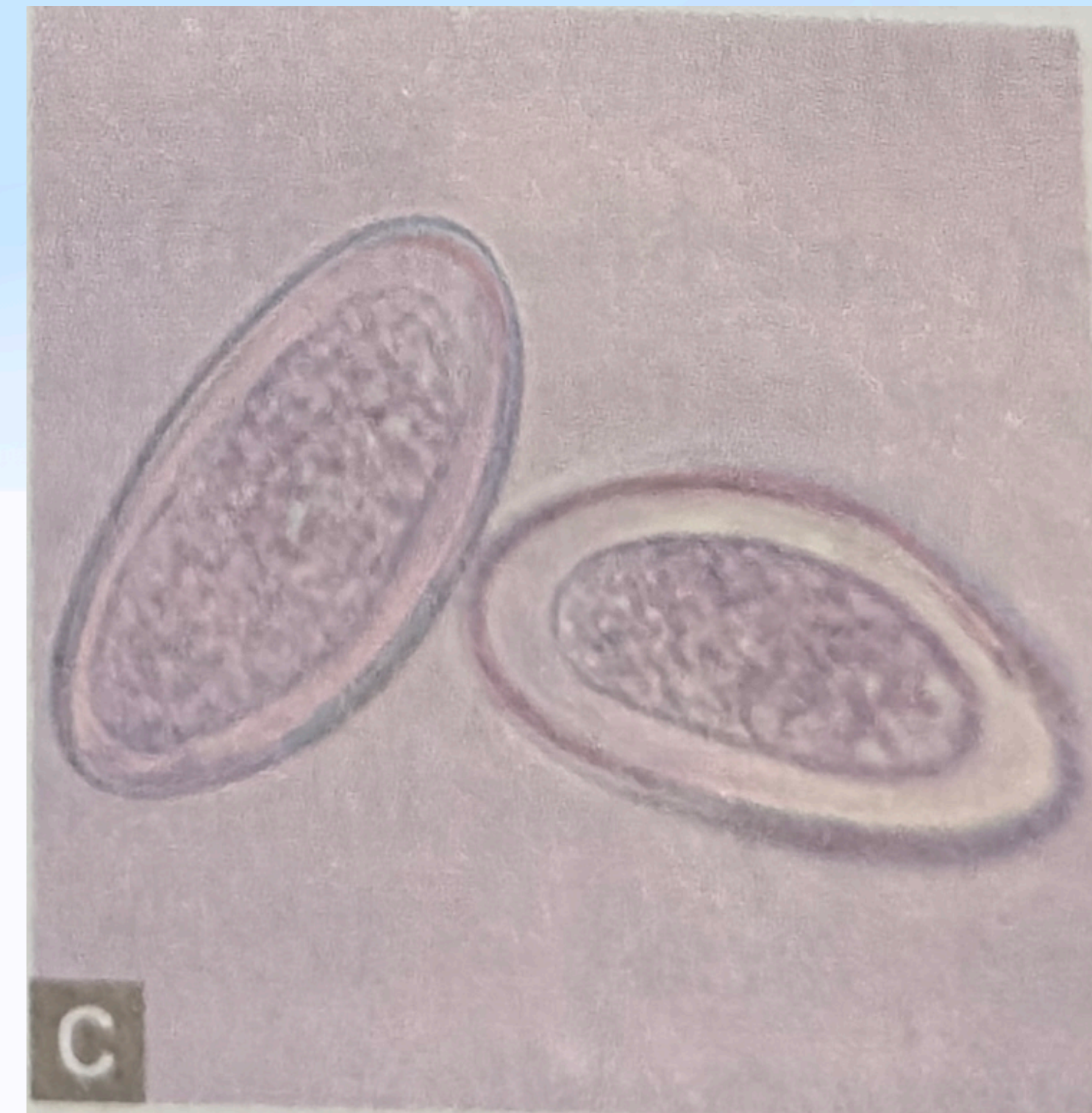
The cellophane part of the glass rod is rolled over the perineal and perianal skin area to collect the sample

- **Number of specimens**: A series of 4-6 consecutive tapes may be necessary as the female worms migrate intermittently
- **Timing**: Samples should be collected when the chance of egg deposition is more such as late evening, or early morning.



EGGS OF ENTEROBIUS

- Eggs are **planoconvex** (one side is convex and the other side is flat), and measure 50-60 um long
- Embryonated egg when freshly passed contains a **tadpole-shaped larva inside**
- **Non - Bile stained**, colourless in saline mount
- Floats in a saturated salt solution



TREATMENT

- ***The recommended drugs are mebendazole or albendazole or pyrantel pamoate.***
- ***The same treatment should be repeated after 2 weeks.***
- ***Treatment of household members is advocated to eliminate asymptomatic reservoirs.***

BIBLIOGRAPHY

Essentials of Medical Microbiology - Apurba S Sastry

THANK YOU