Wuchereria braconfti
Phylum - Nematoda

Class - Secernentea

e.g. - *Wuchereria bancrofti*
• Geographical Distribution – tropics and subtropics
Habitat

- Adult worm – lymphatic vessel and lymph nodes of man only
Morphology

- Adult worm - long hair-like transparent nematodes
  - creamy-white
  - filiform shape
- Male
  - 2.5 to 4 cm in length, 0.1 mm thickness
  - tail - end curved
  - two spicules of unequal length

*[Diagram of Wuchereria bancrofti - Adult]*
LIFE CYCLE

- DEFINITIVE HOST - Man (In human lymphatic system)

- INTERMEDIATE HOST - Mosquitoes
  - Culex quinquesfasciatus
  - Anopheles
  - Aedes
Life cycle
STAGES IN THE DEVELOPMENT OF MICROFILARIA IN THE MOSQUITO

1. Rest and begin to grow

1. The first - stage larva

3. The second - stage larva

4. The third - stage larva (infected stage)
Stage 1

- anterior end of the stomach

- Penetarte the gut wall

- migarte thoracic muscle (1-2 hr)

- Rest and become to grow
Stage.2

• next 2 days
• snake-like → sausage-shape
• short spiky tail
• 124-250 in length & 10 - 17 breath
• a rudimentary digestive tract

★ The first - stage larva
Stage. 3

• 3 to 7 day’s time
• grow rapidly grow
• moult (sheds cuticles) once or twice
• 225-330 length & 15 – 30 breadth

★ The second – stage larva
Stage 4

- 10\textsuperscript{th} or 11\textsuperscript{th} day
- Metamorphosis complete
- Tail atrophies, digestive system,
- Body cavity, genital organ fully development
- 3 subterminal caudal papillae
- 1500-2000 length & 18-23 breadth

★ The third-stage larva
★ Infected to man
• proboscis sheath of mosquito

• about 14\textsuperscript{th} day

• several larvae remaining coiled up

\textbf{Noted}

• one microfilaria $\rightarrow$ one infective larva
Wuchereria bancrofti

**Mosquito Stages**

1. Mosquito takes a blood meal (L3 larvae enter skin)
2. Migration to mosquito head and proboscis
3. L2 larvae

**Human Stages**

4. Mosquito takes a blood meal (ingests microfilariae)
5. Microfilariae shed sheaths, penetrate mosquito’s midgut, and migrate to thoracic muscles
6. L1 larvae
7. Adults in lymphatics
8. Adults produce sheathed microfilariae that migrate into lymphatic and peripheral blood circulation

**Infective stage**

**Diagnostic stage**
ENTRACE IN TO MAN AND DEVELOPMENT INTO ADULT WORMS

Third stage larvae enter

- puncture wound or
- penetrate through the skin on their own
Entrance in to man
DISEASES AND SYMPTOMS

Hydrocele/ Scrotal Swelling
THANK YOU