DPDx Case of the Week

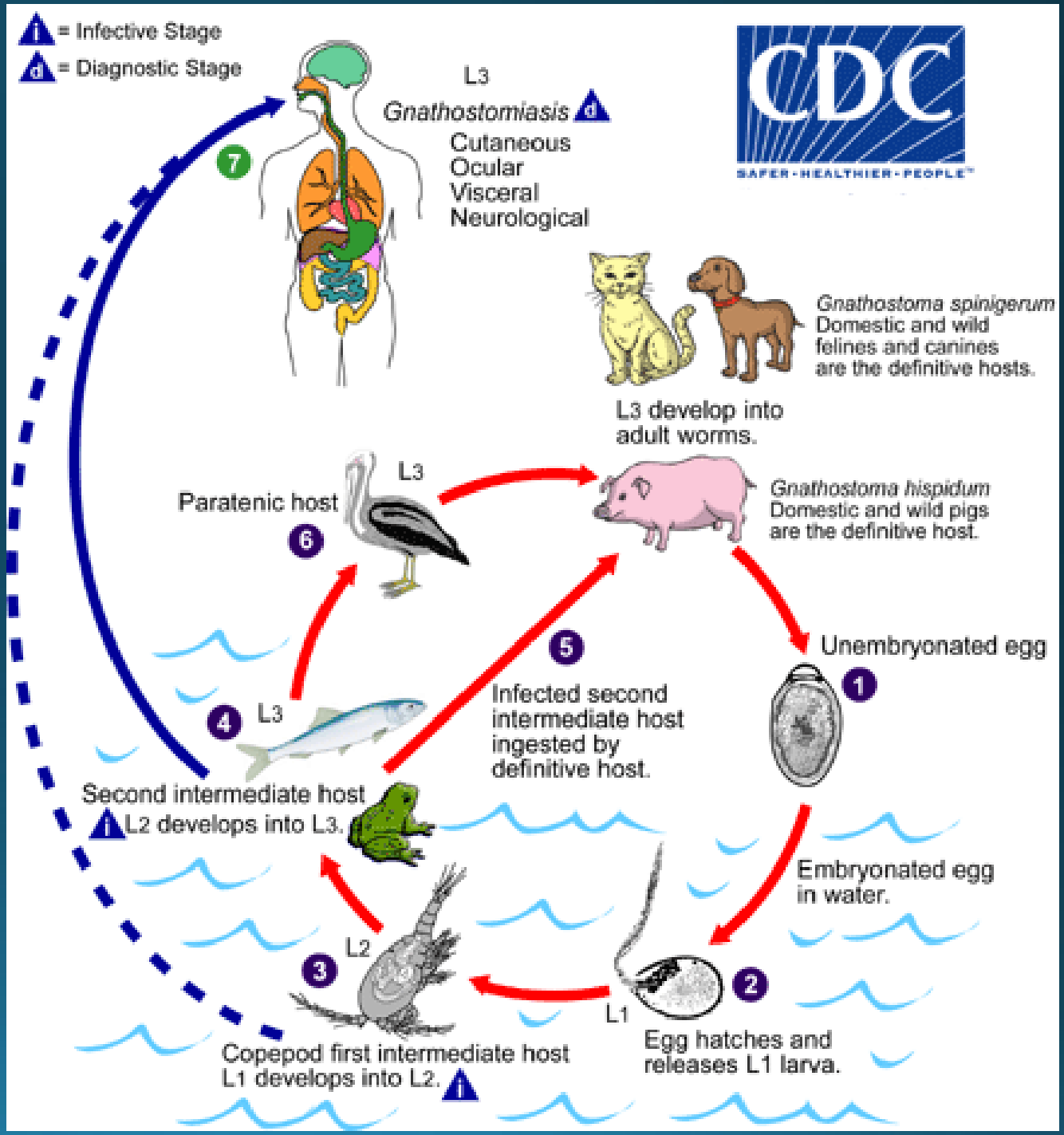
Sarah Sapp

- 46 year old woman from Bangladesh with eosinophilia, *Schistosoma* antibody positive
- Treated with praziquantel on 6/13/18
- Painful rash developed following week, returned to clinic 6/22/18
- 2 cm worm found erupting from inflammatory track on sternum, extracted

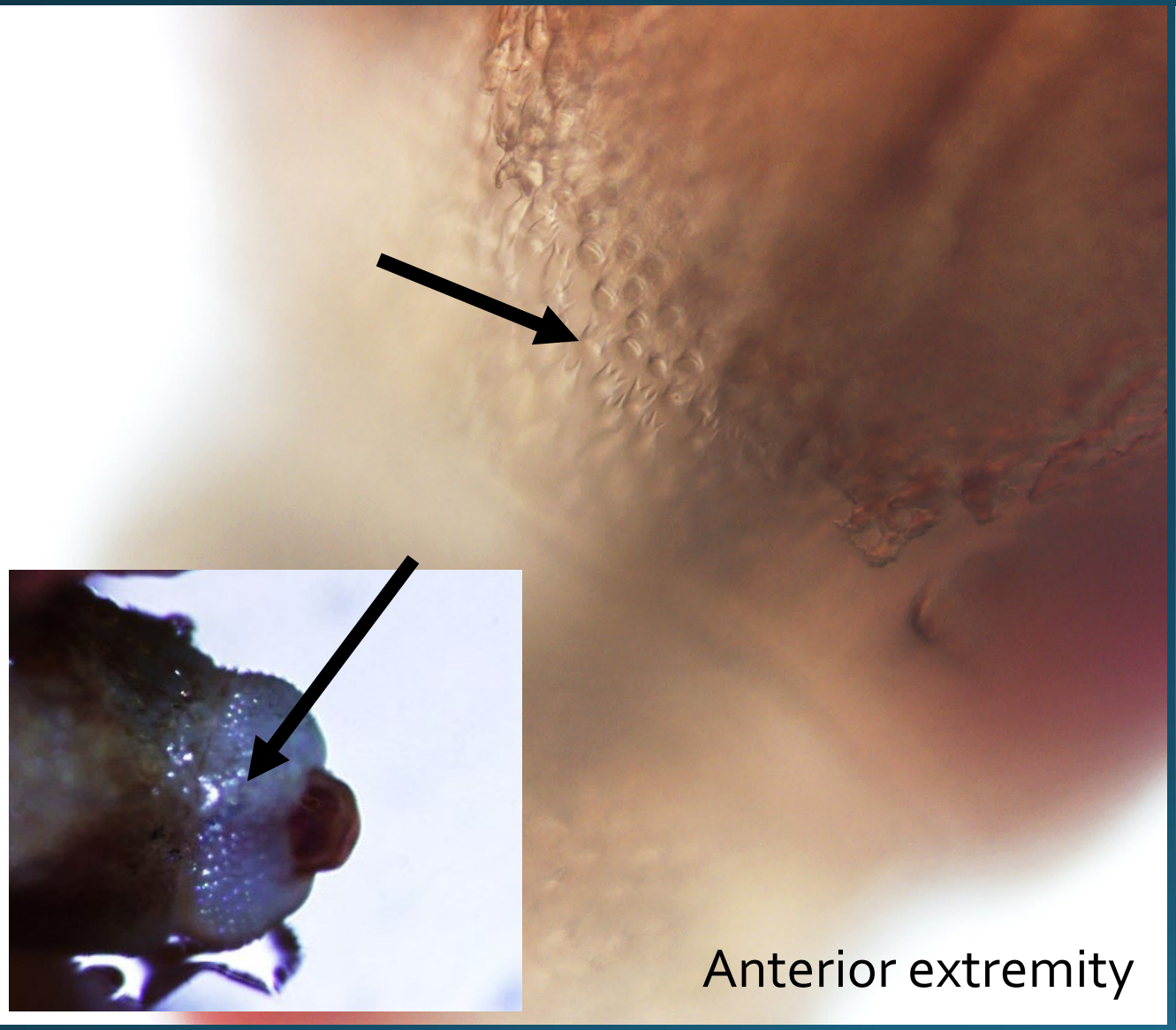
TeleDx Submission

What is your diagnosis?

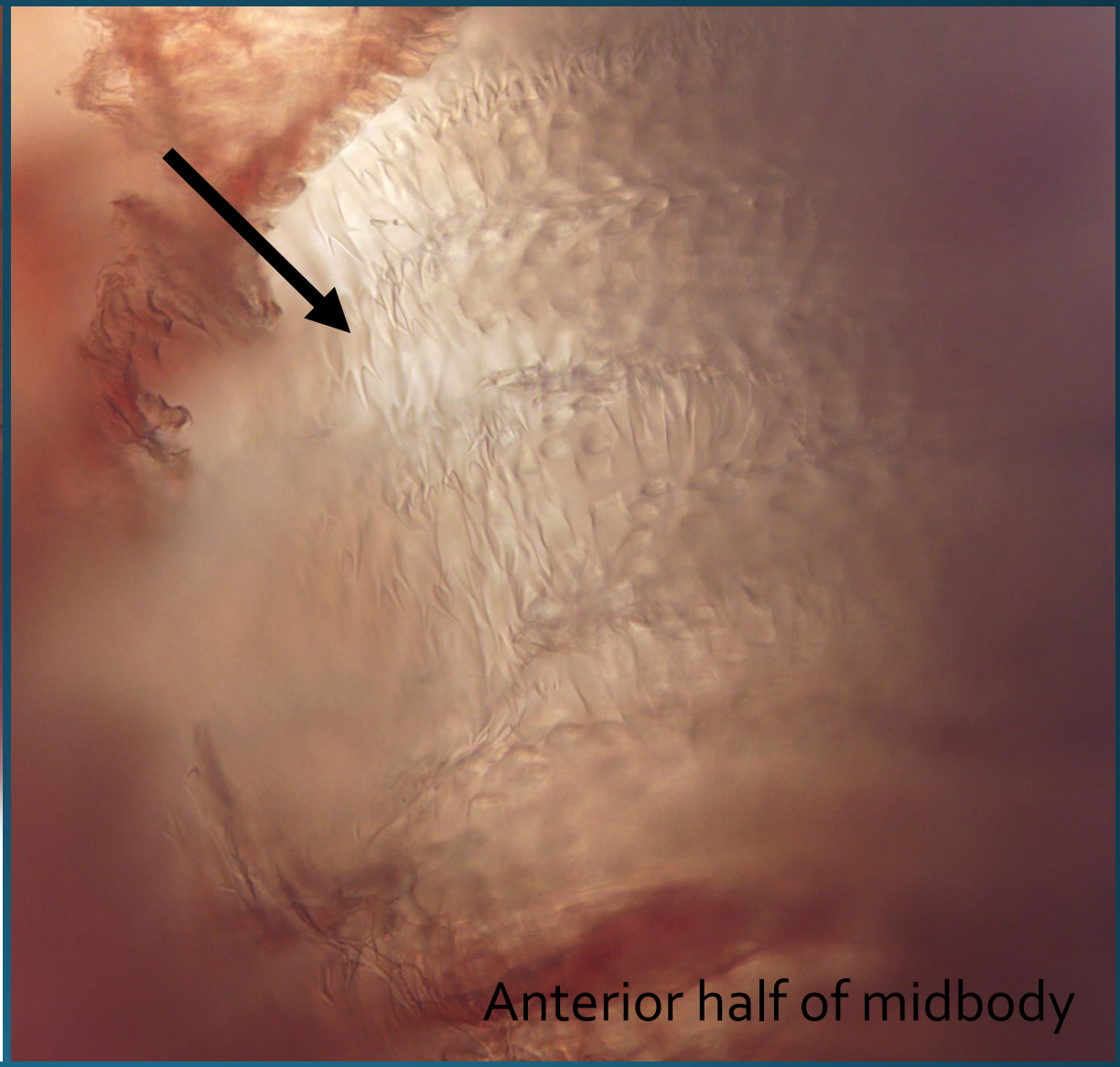
- Dx: **Cutaneous gnathostomiasis**
- Subadult male
  - Typically "advanced L3" (AL3) larvae found in human infections
  - Too large, too many cephalic spines for larval stage
- Transmission via ingestion of paratenic hosts or maybe intermediate host (copepod)
- "Larva migrans profundus"



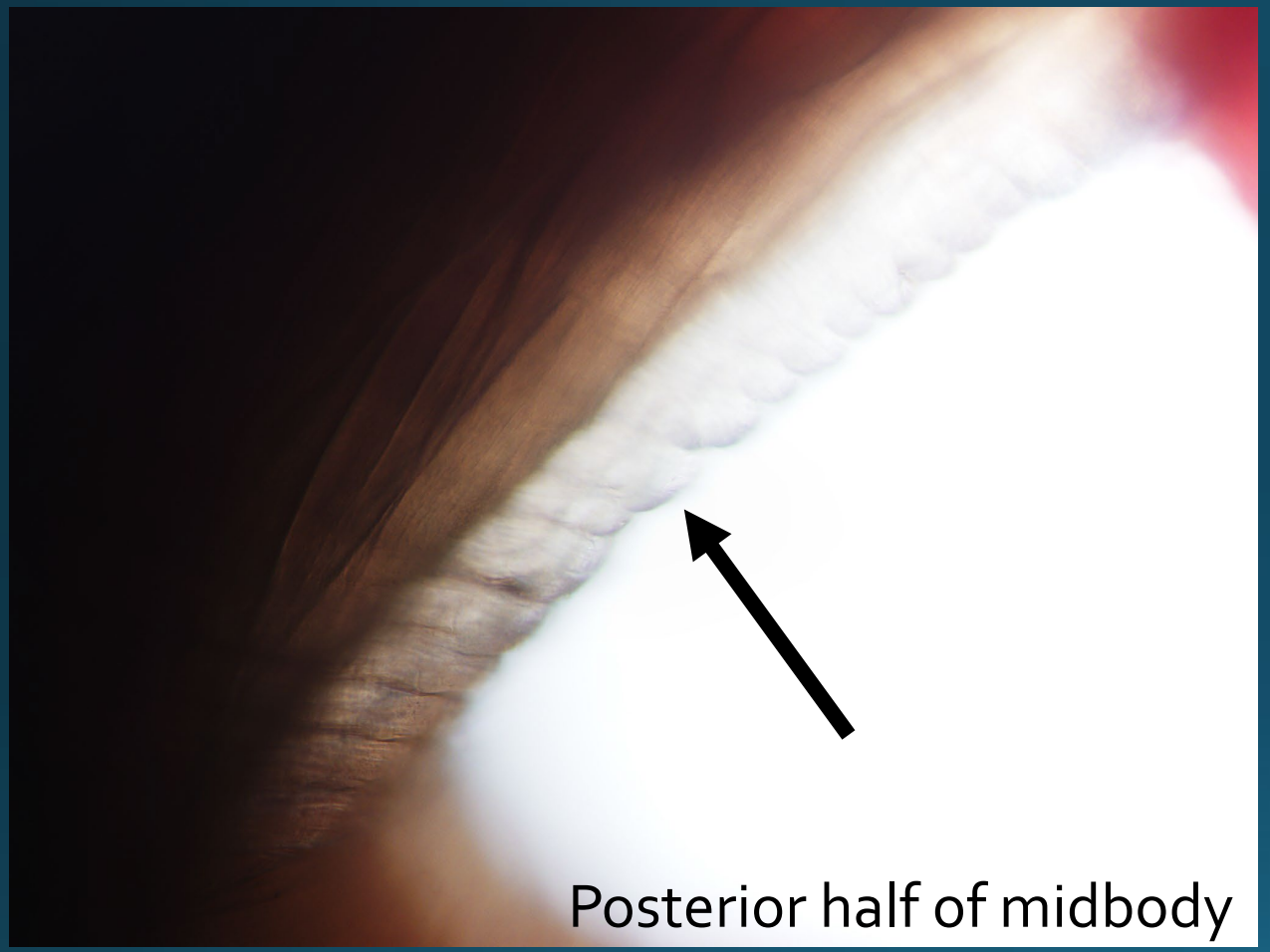
Not 2 cm…. 0.66 cm (x 675-950 µm wide)



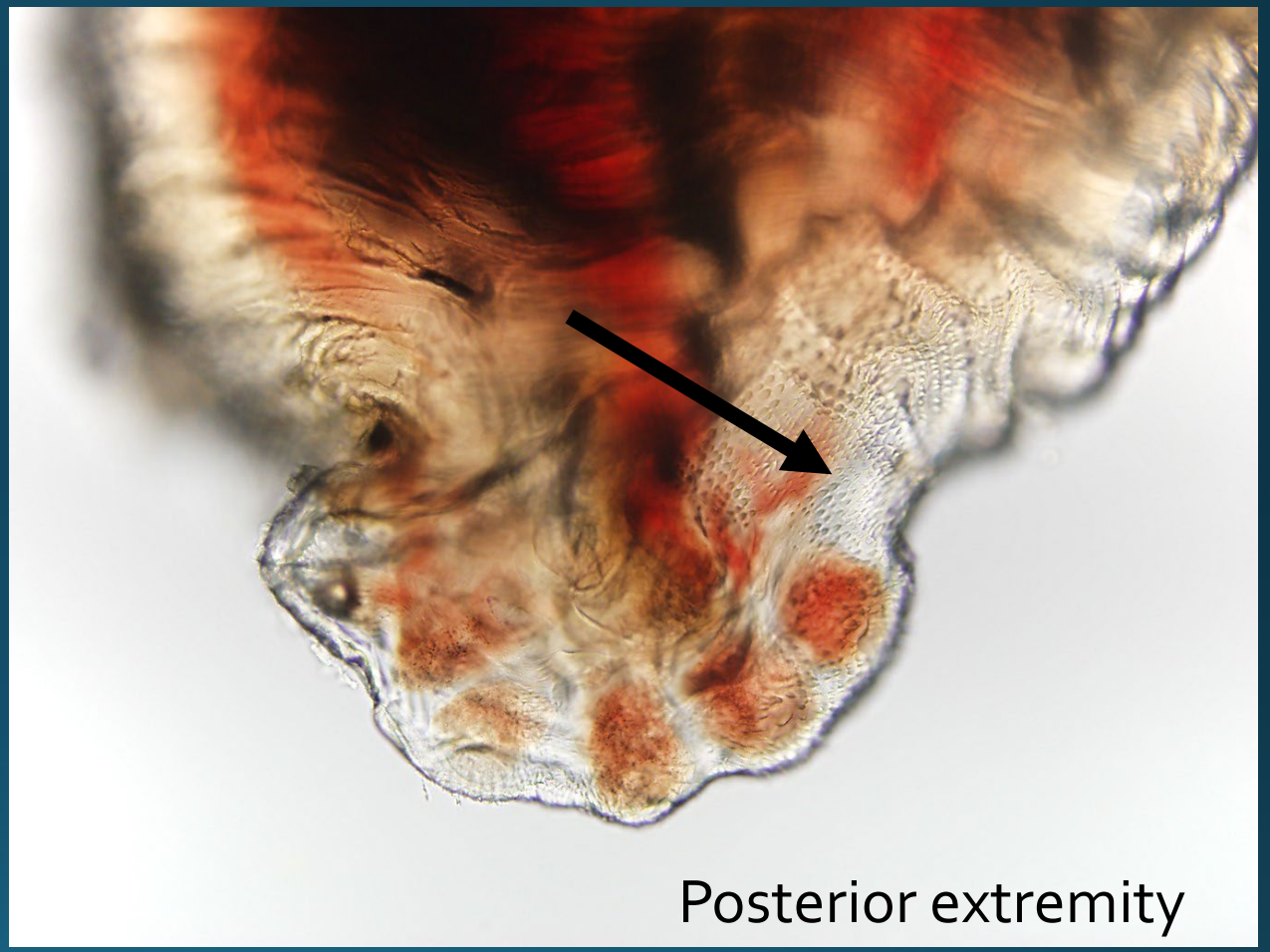
Anterior extremity



Anterior half of midbody



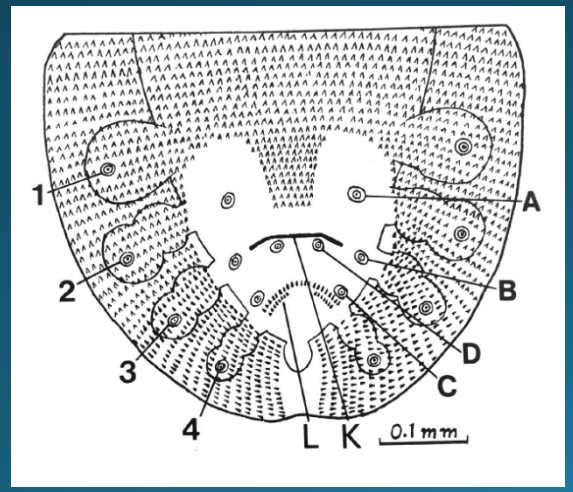
Posterior half of midbody

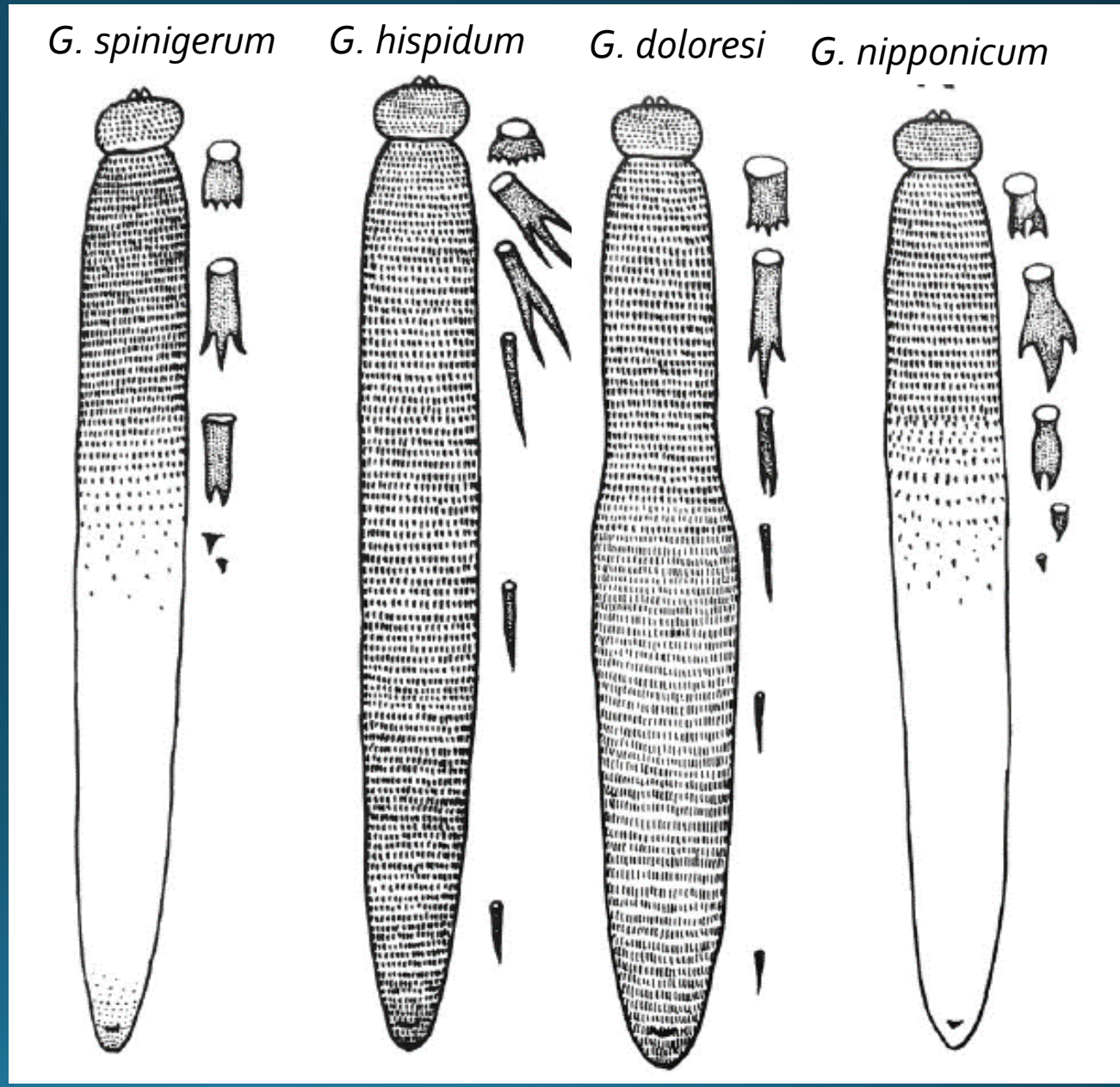


Posterior extremity

- *Gnathostoma* species known to infect humans:
  - *Gnathostoma spinigerum* (Asia, tropical Australia, southern and eastern Africa)
  - *Gnathostoma hispidum* (Southeast Asia, India)
  - *Gnathostoma binucleatum* (Central and South America)
  - *Gnathostoma nipponicum* (Japan)
  - *Gnathostoma doloresi* (Japan, Southeast Asia)
  - Two cases of possible (unconfirmed) cases of *Gnathostoma malaysiae* acquired in Myanmar have been reported

- Causative agent: **Likely *G. spinigerum***
- Specific diagnosis based primarily on character and occurrence of body spines
  - Overlap in # rows of cephalic spines, but non *G.s.* usually have >10
- Prominent caudal alae, Y-shaped clearance
- *G.s.* predominant sp. in Bangladesh
- PCR and histopath pending





Illustrated Guide to Helminthic Zoonoses, I. Miyazaki 1991