

مطالعه چند نمونه از شاخه

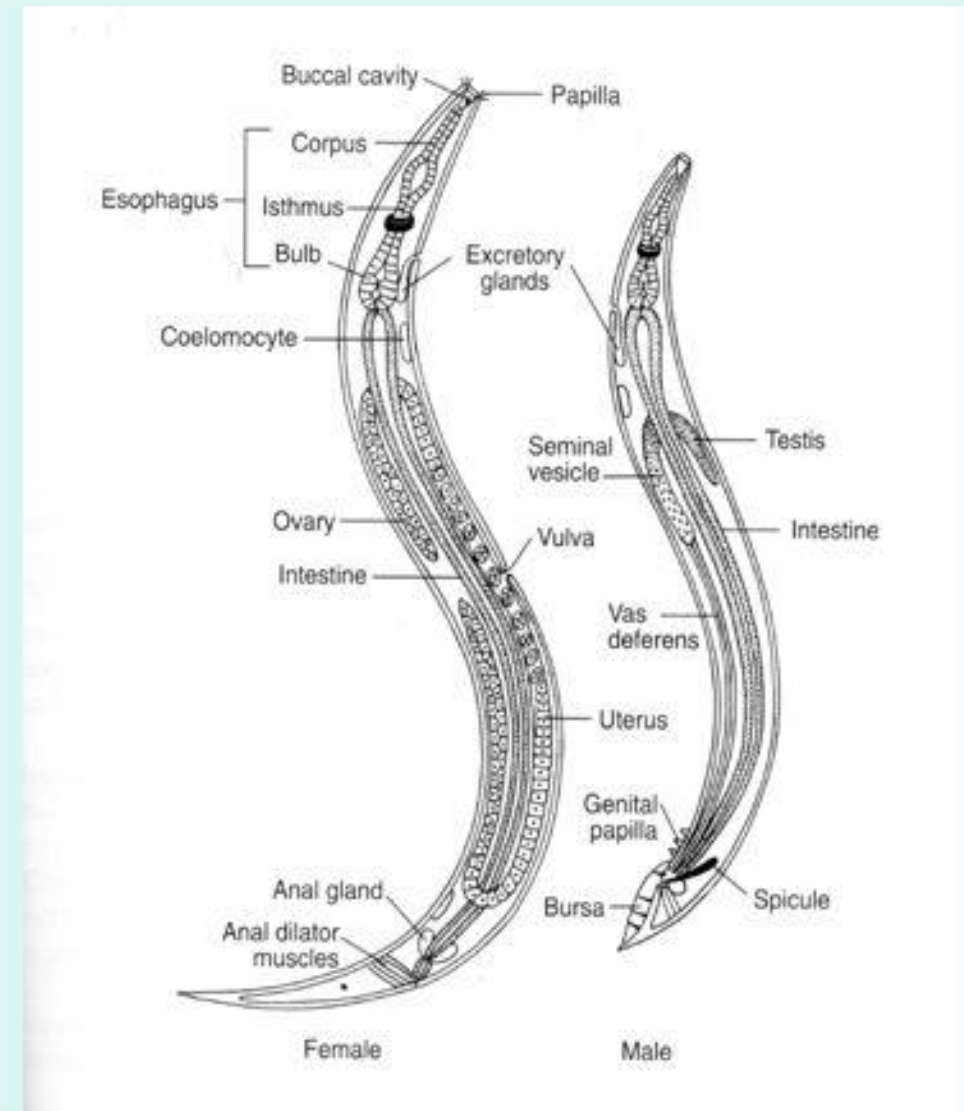
کرم‌های لوله‌ای

Nematoda

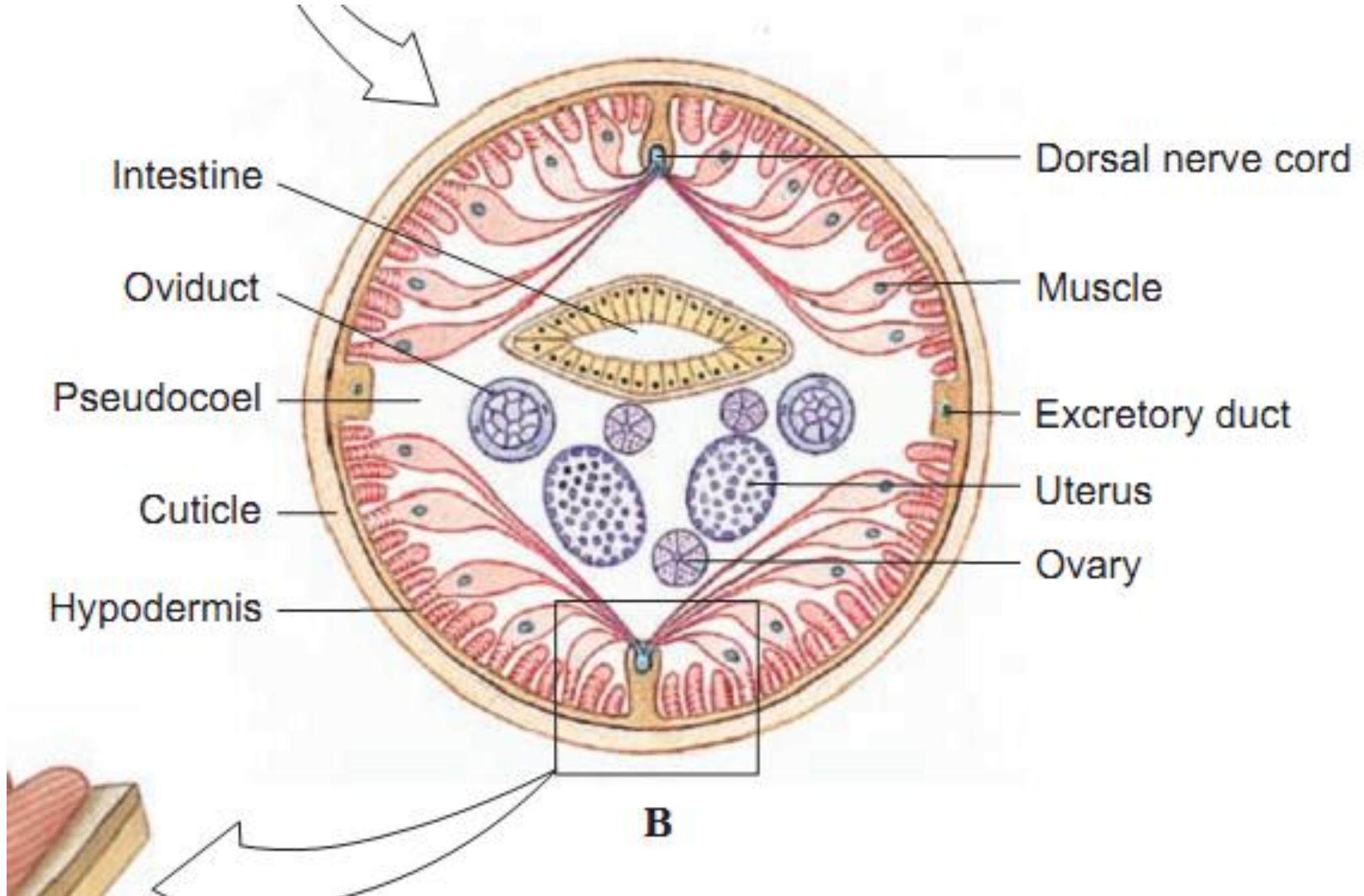
# 1. Morphology of nematodes

## 1) General morphology

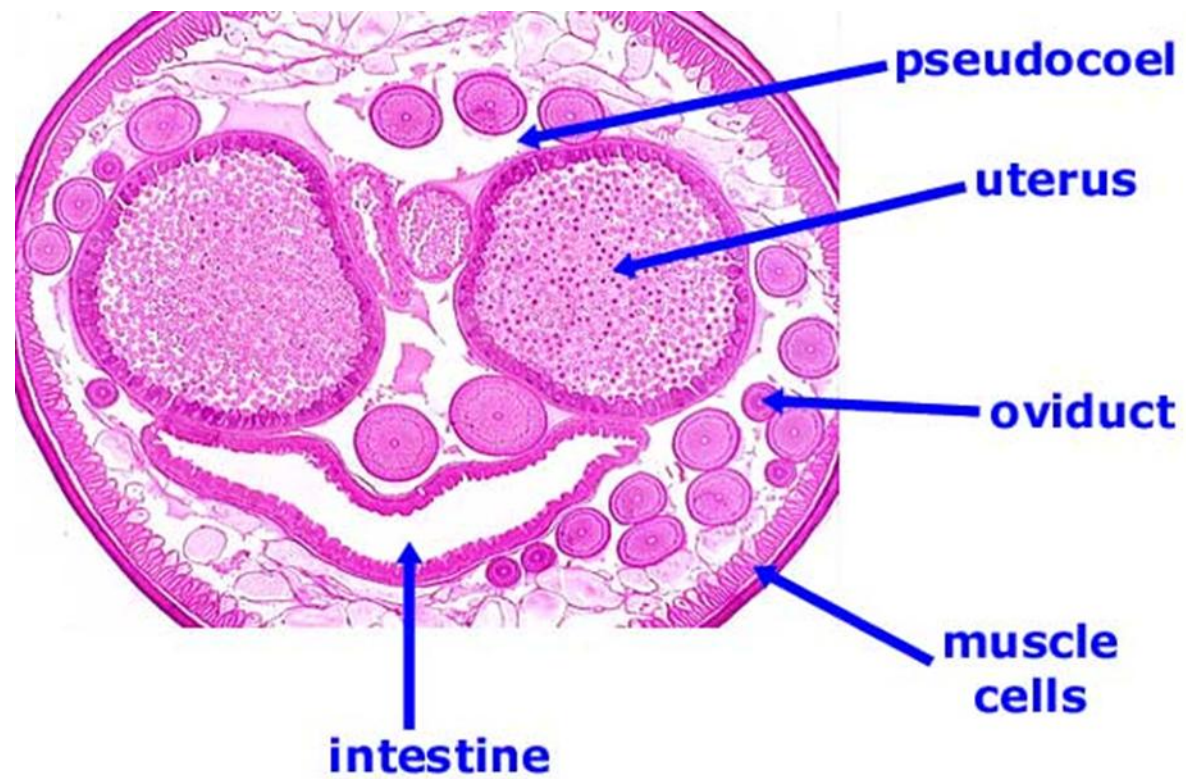
- (1) Tubular in shape and bilaterally symmetrical
- (2) With a complete digestive canal
- (3) Adult worm separated in male and female



# برش عرضی آسکاریس ماده

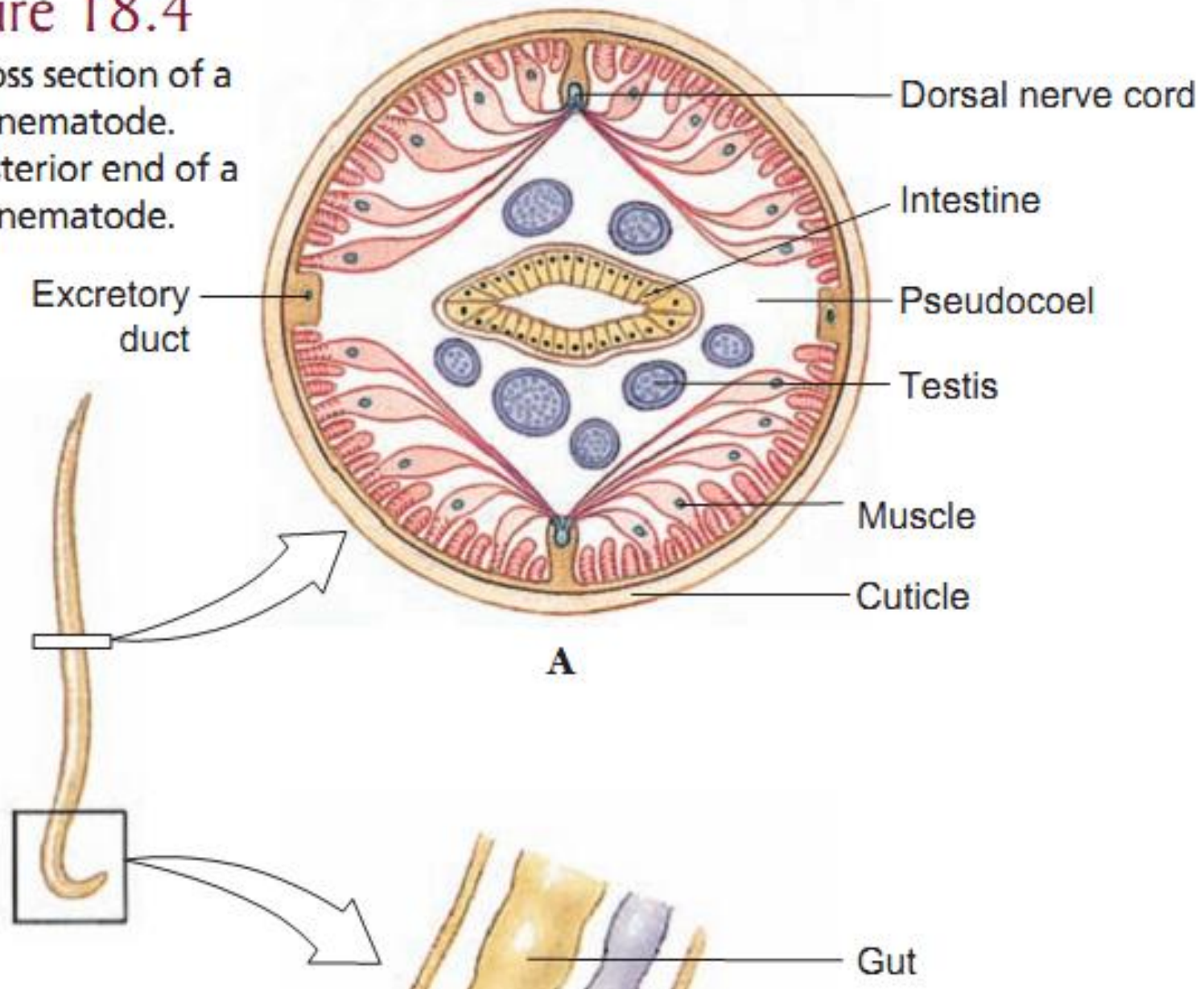


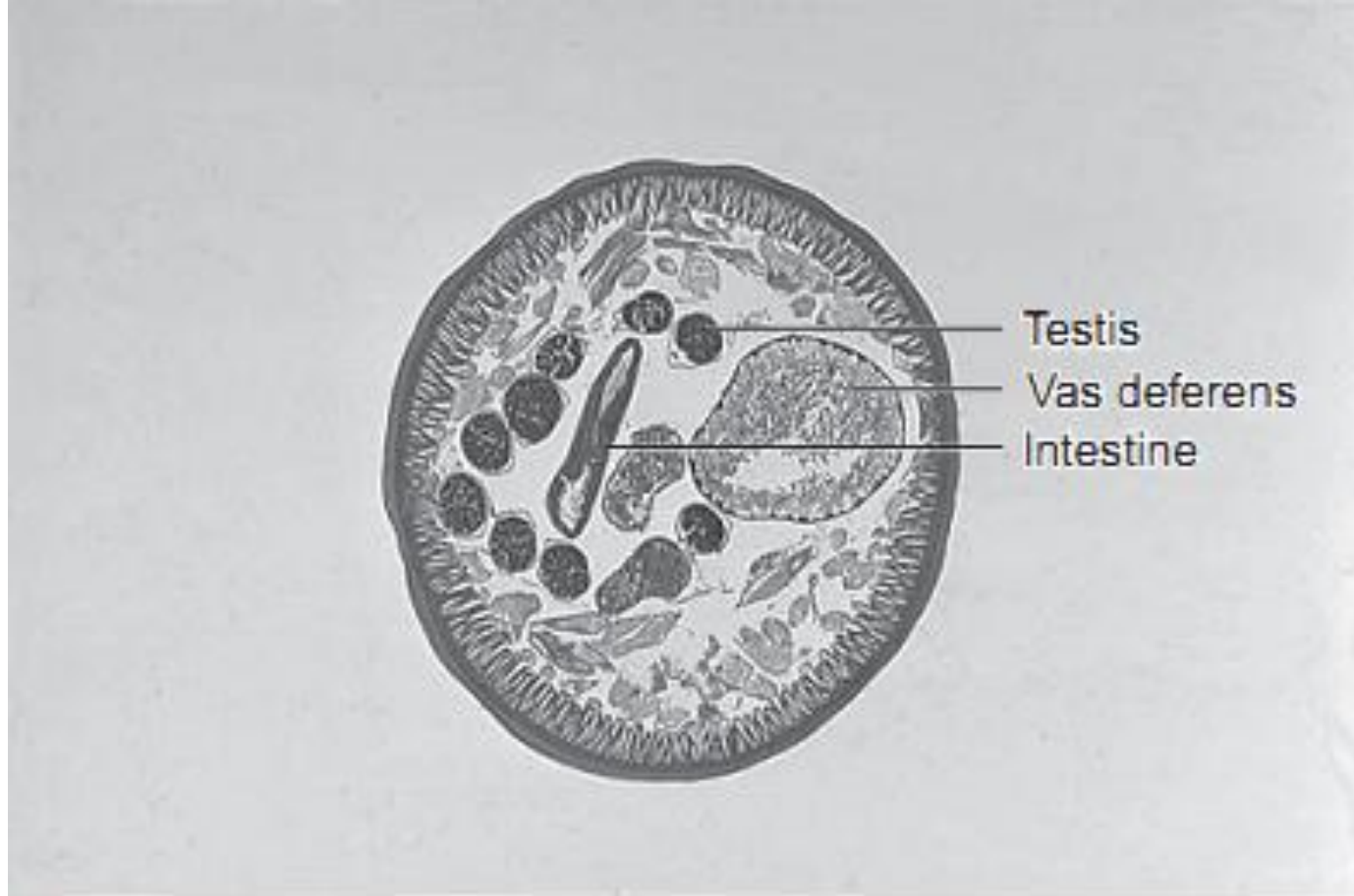
# برش عرضی آسکاریس ماده



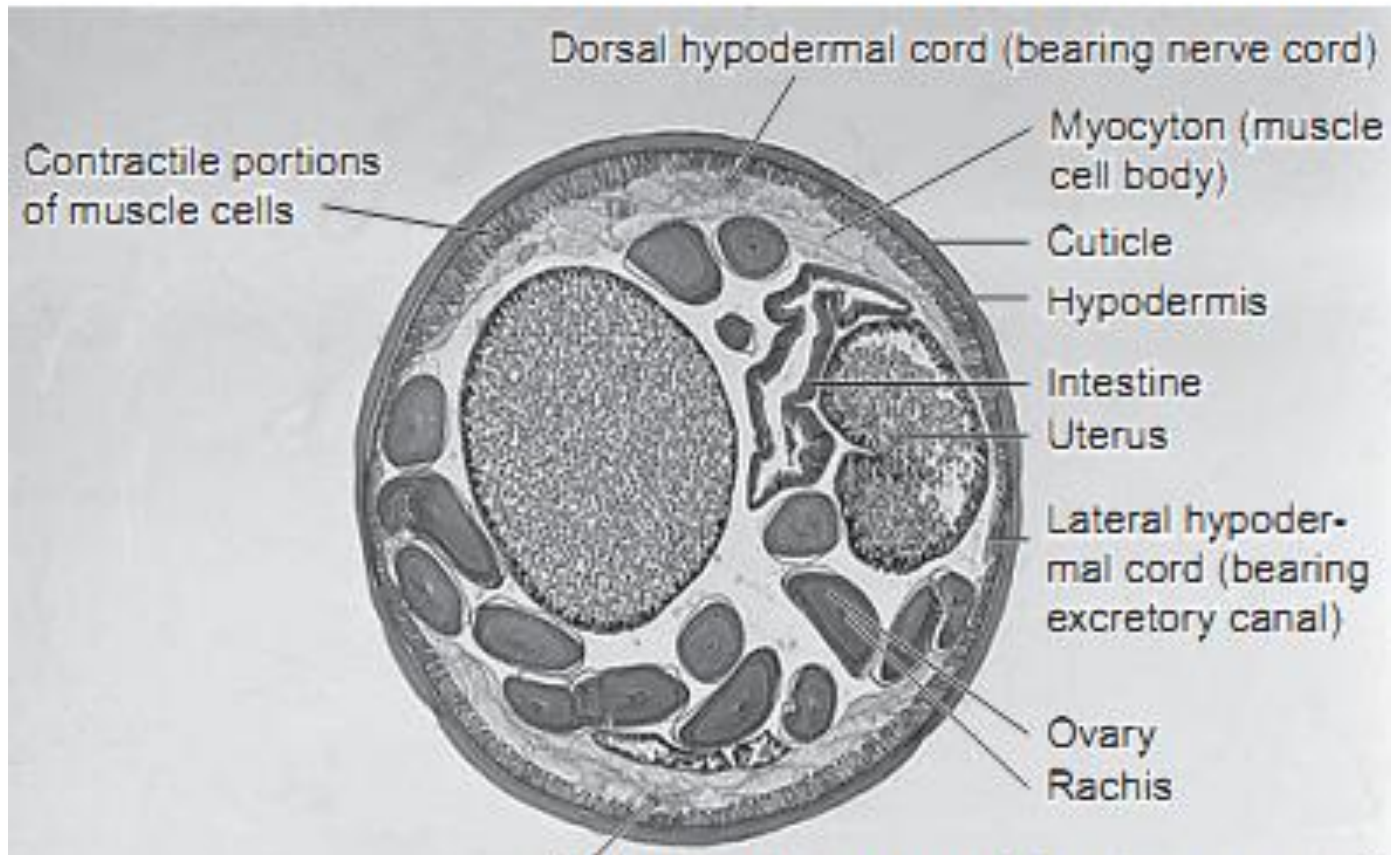
## Figure 18.4

A, Cross section of a male nematode.  
B, Posterior end of a male nematode.



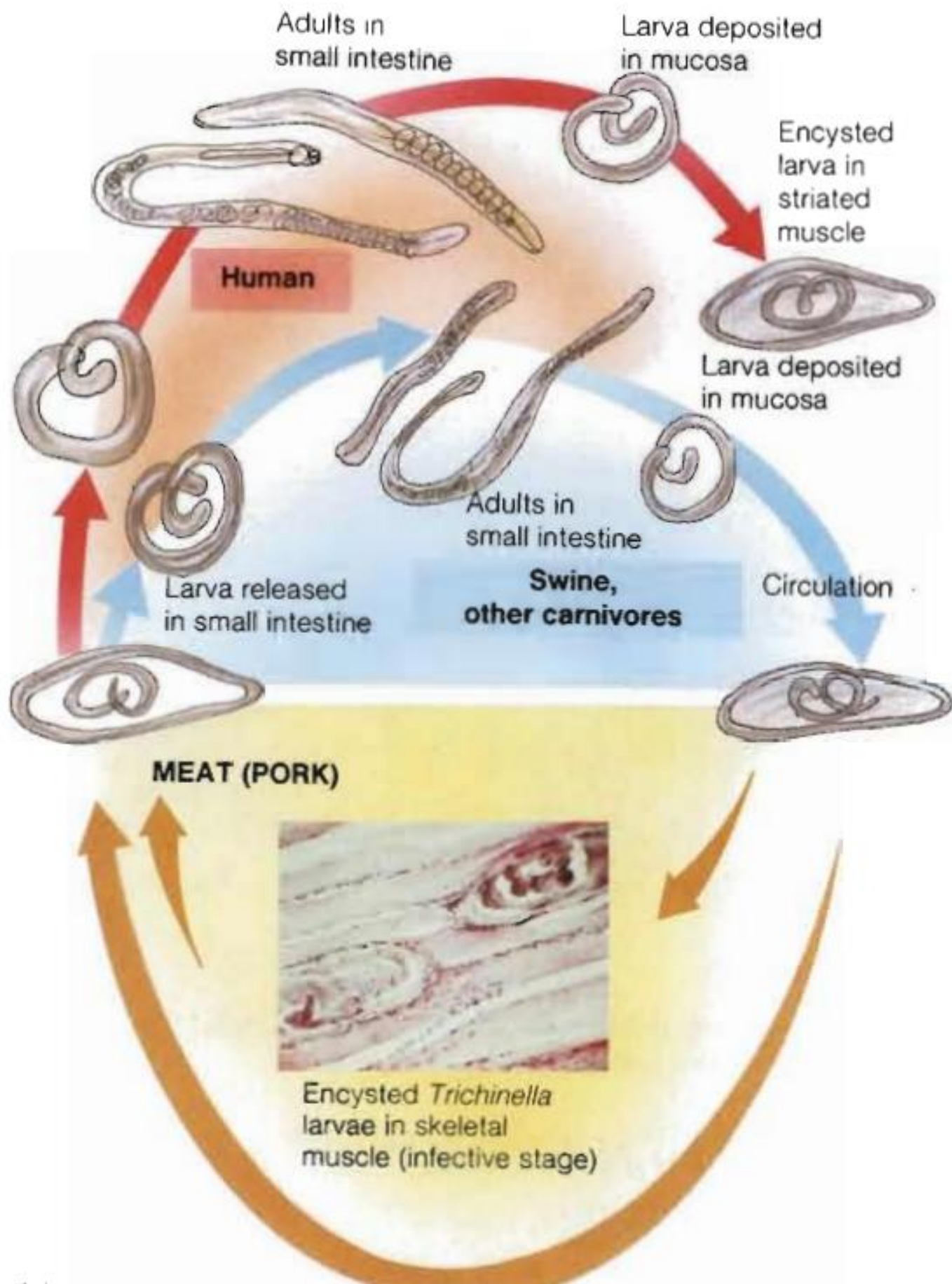


(a)

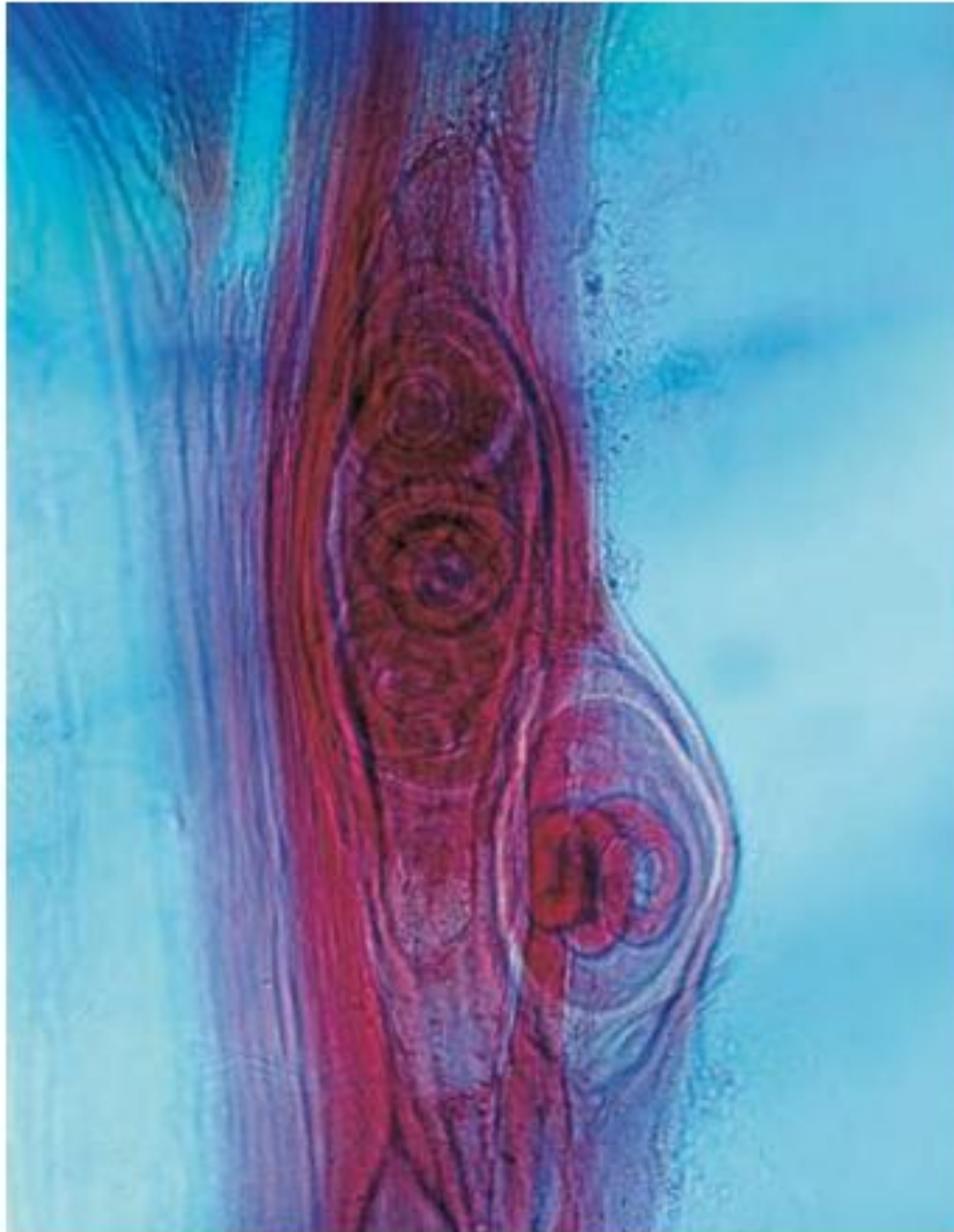


# *Trichinella spiralis*

- انگل نماتودا
- چرخه زندگی مستقیم
- لارو به شکل کیست در ماهیچه مخطط در آمده و باعث بیماریزایی می شود.
- انسان آلوده می شود با خوردن گوشت خوک
- عامل بیماری تریشینوز







## Figure 18.8

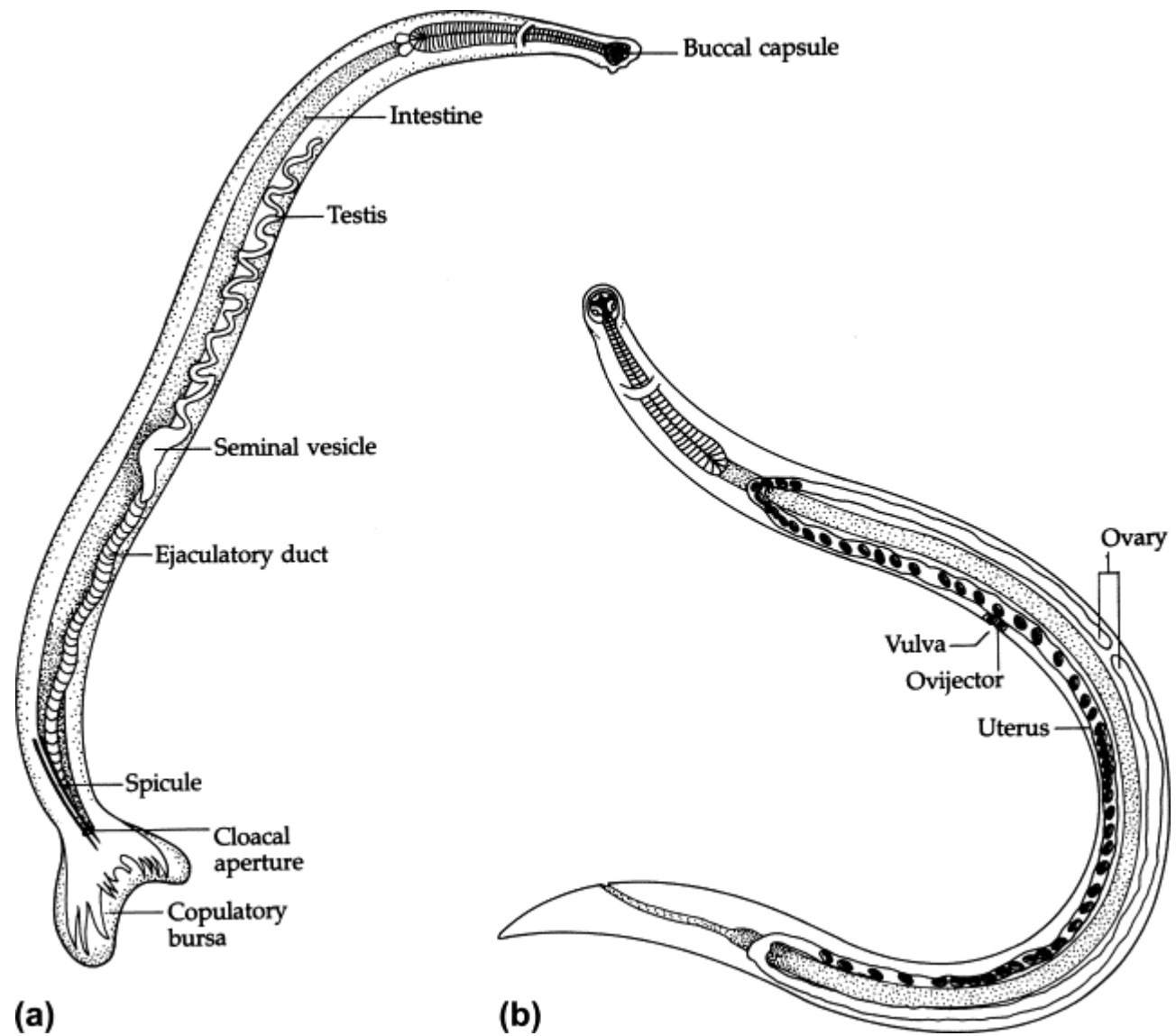
Muscle infected with trichina worm *Trichinella spiralis*. The juveniles lie within muscle cells that the worms have induced to transform into nurse cells (commonly called cysts). An inflammatory reaction occurs around the nurse cells. Juveniles may live 10 to 20 years, and nurse cells eventually may calcify.

Hook worms

*Ancylostoma caninum*



# *Ancylostoma* (male and Female)



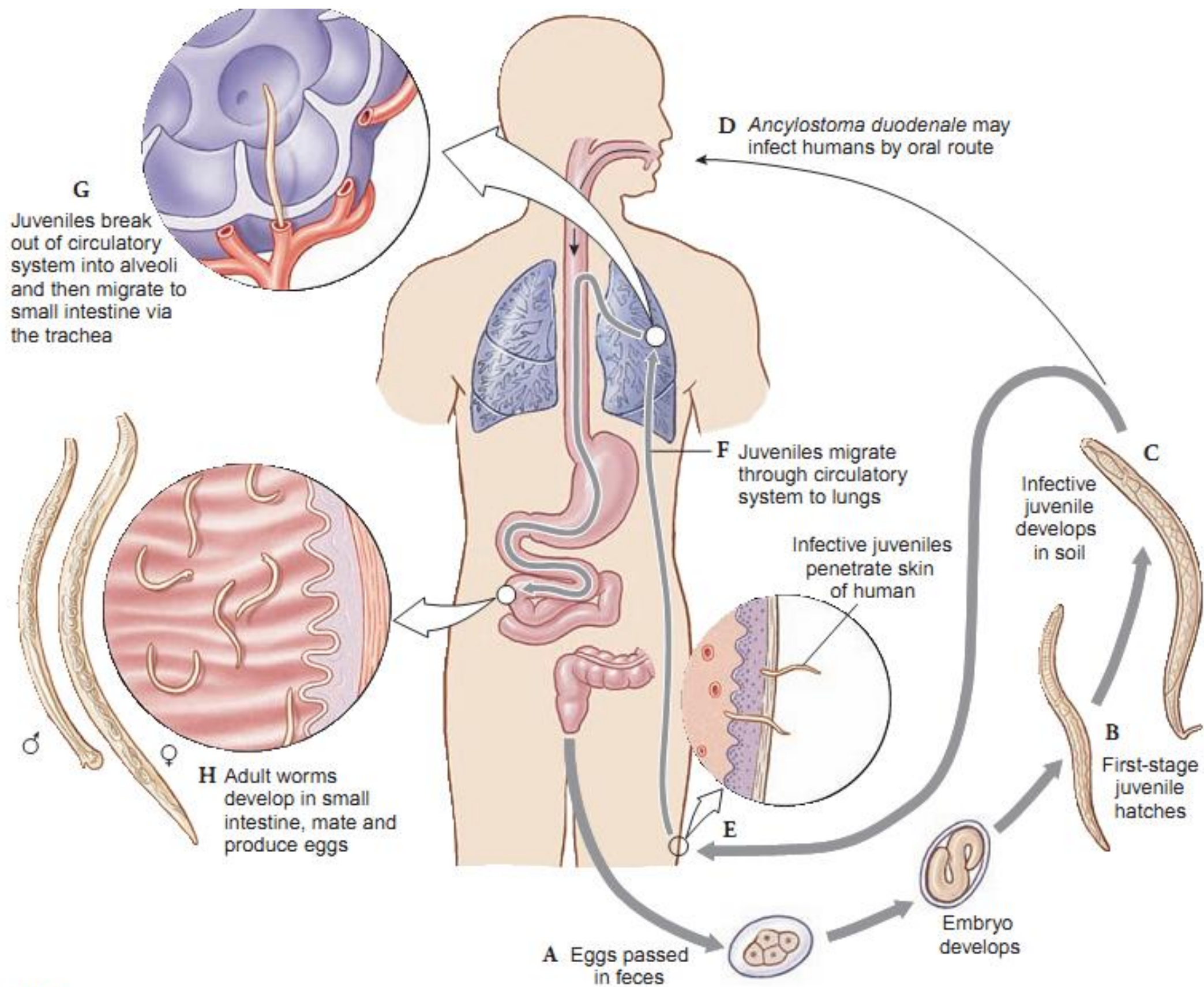


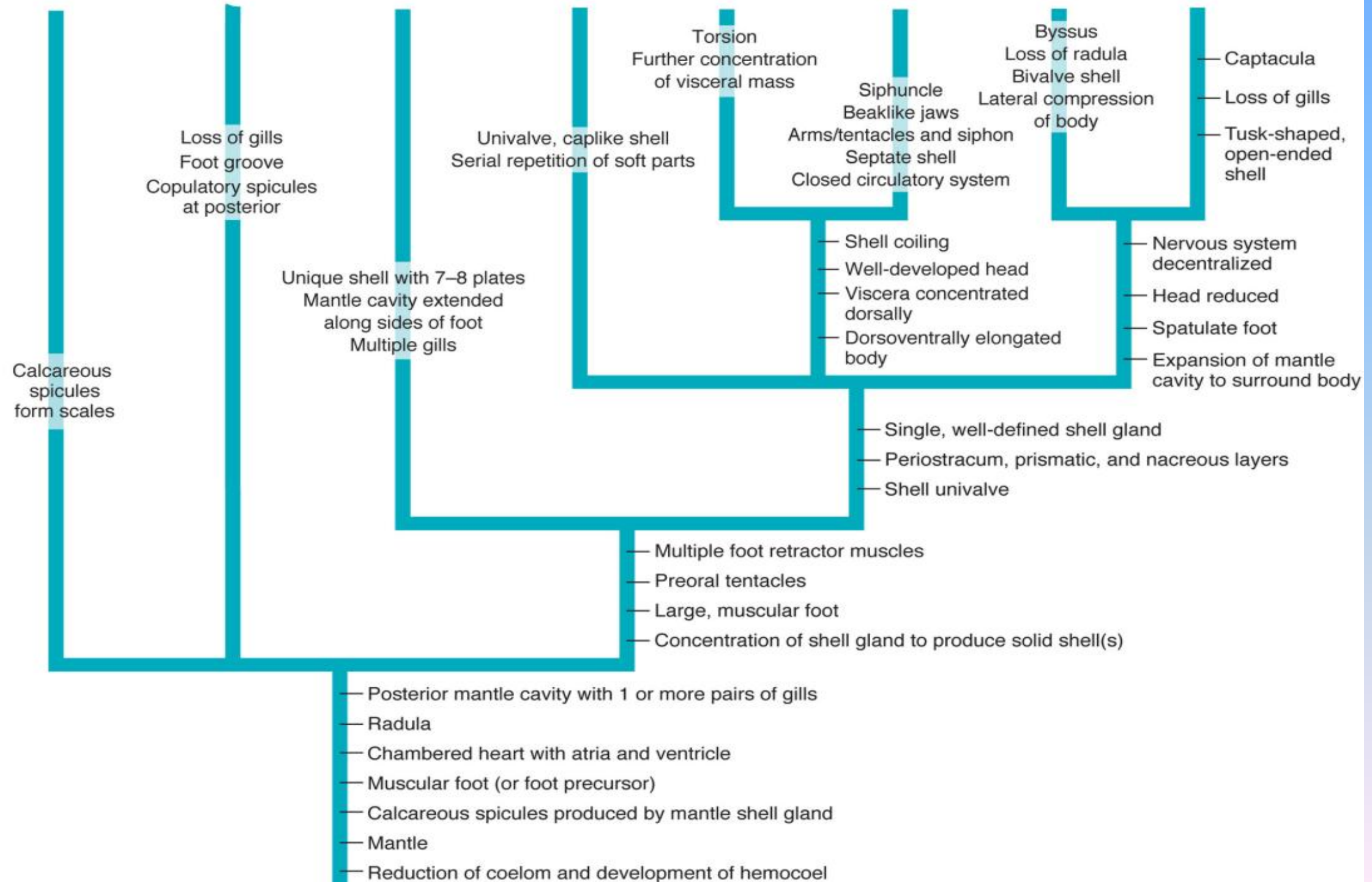
Figure 18.7

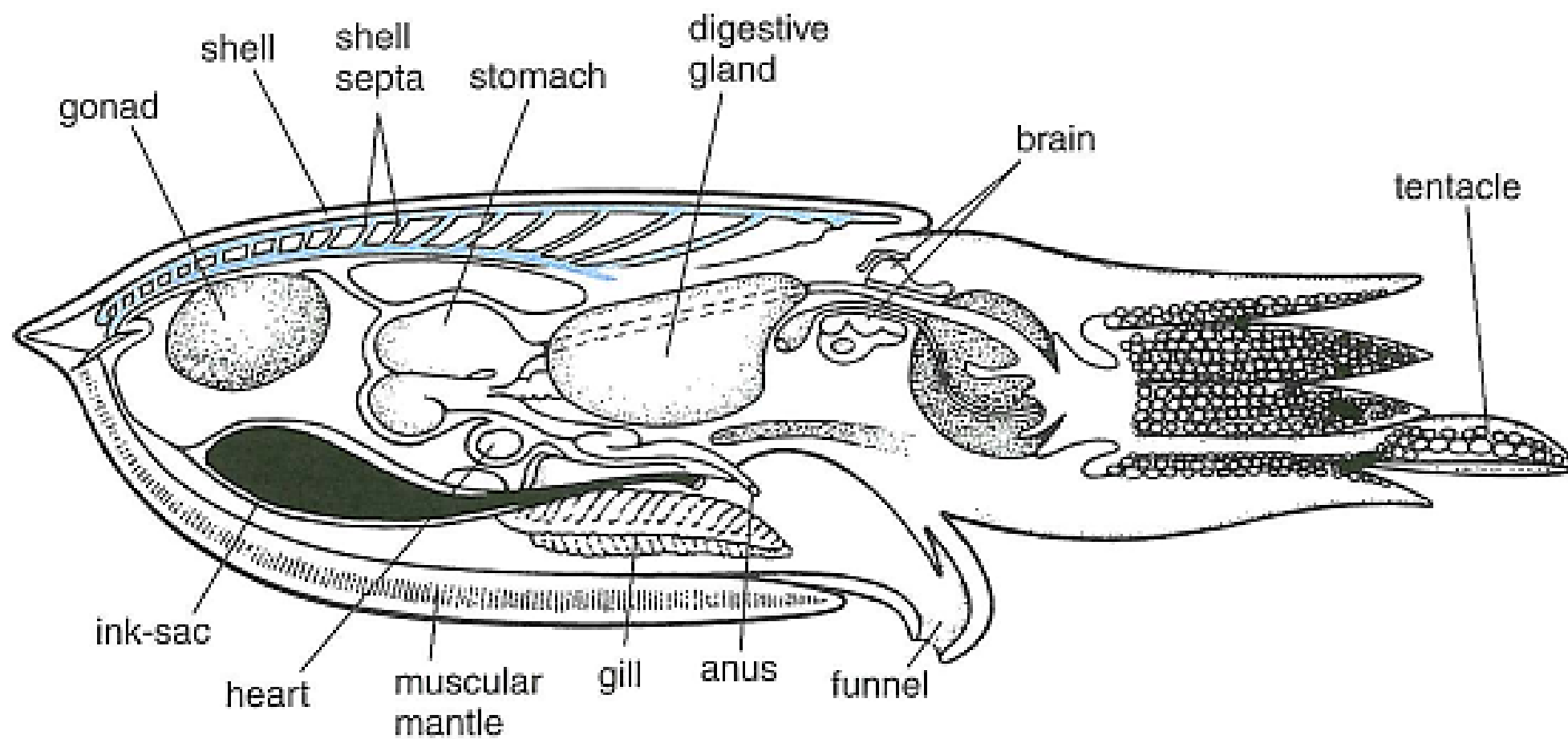
Mollusca

Conchifera



Caudofoveata Solenogastres Polyplacophora Monoplacophora Gastropoda Cephalopoda Bivalvia Scaphopoda





(a)



# رده پلی پلاکوفورا یا کیتون ها

Mollusca - Class Polyplacophora (chitons)

