

5. 血球と循環器系
(Hemolymph and
Circulatory system)

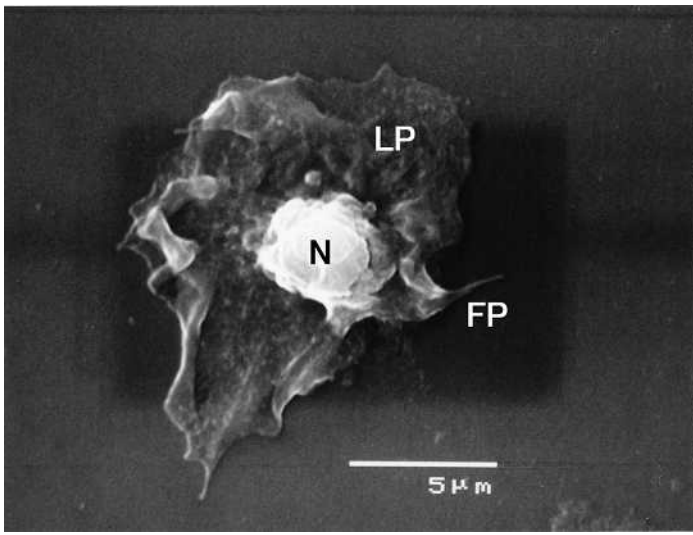


图5.1

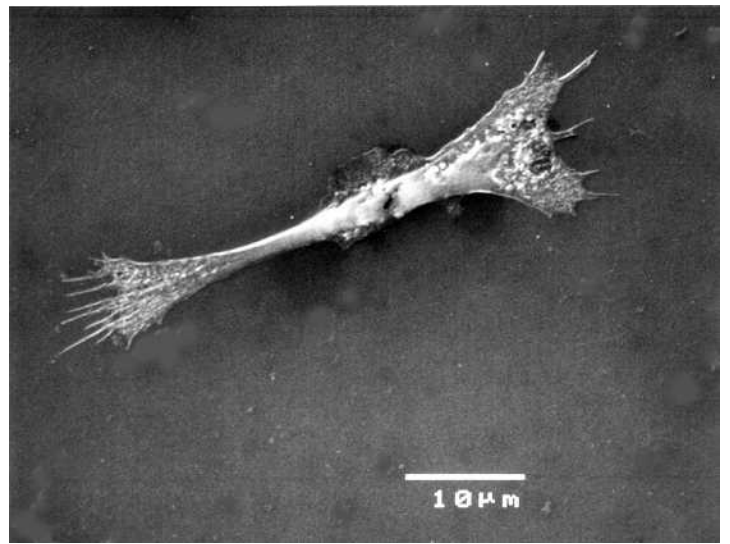


图5.2

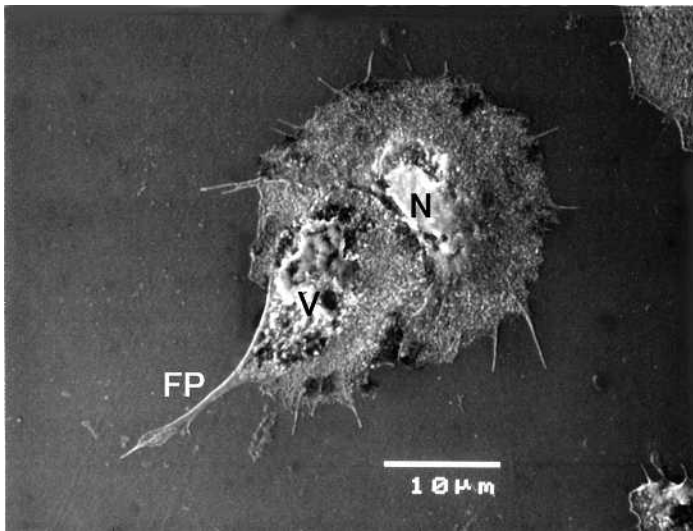


图5.3

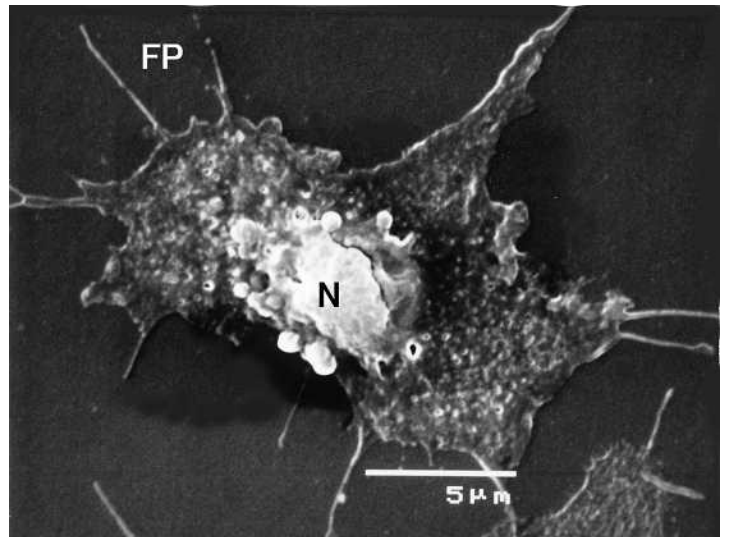


图5.4

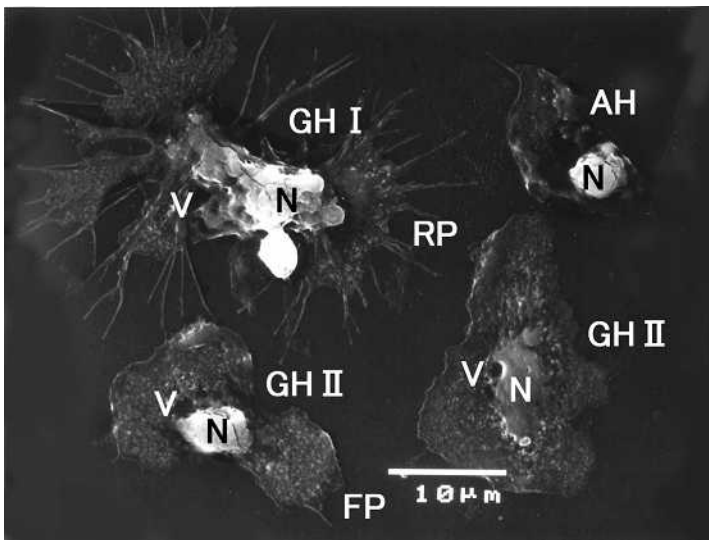


图5.5

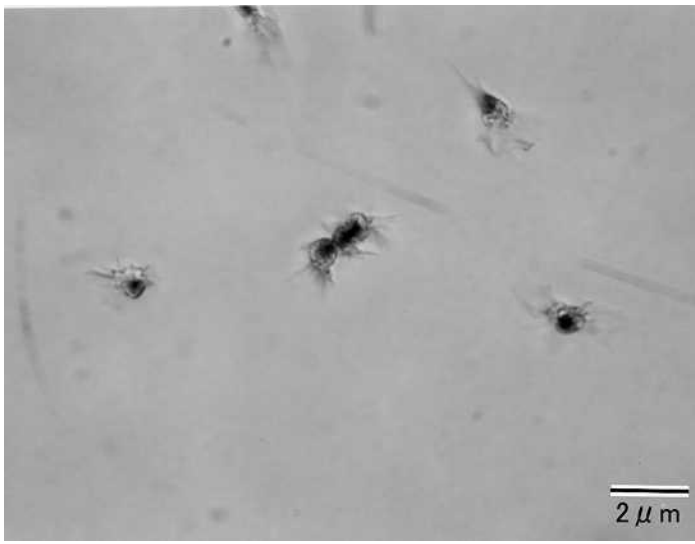


图.5.6

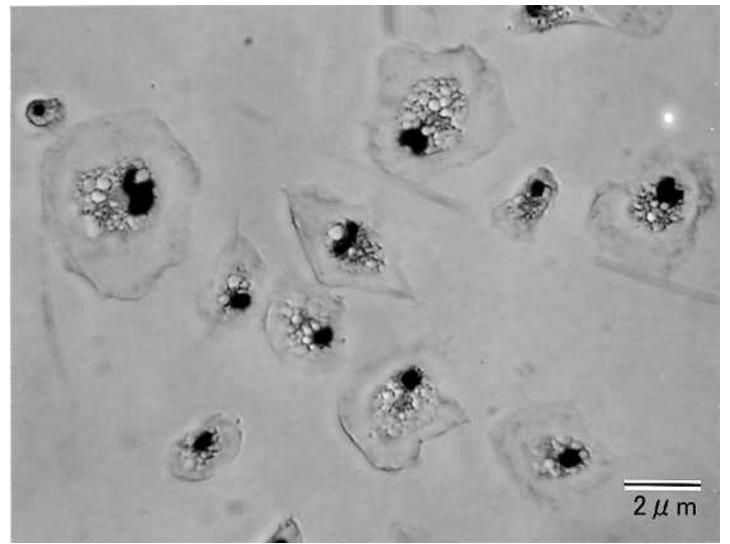


图.5.7

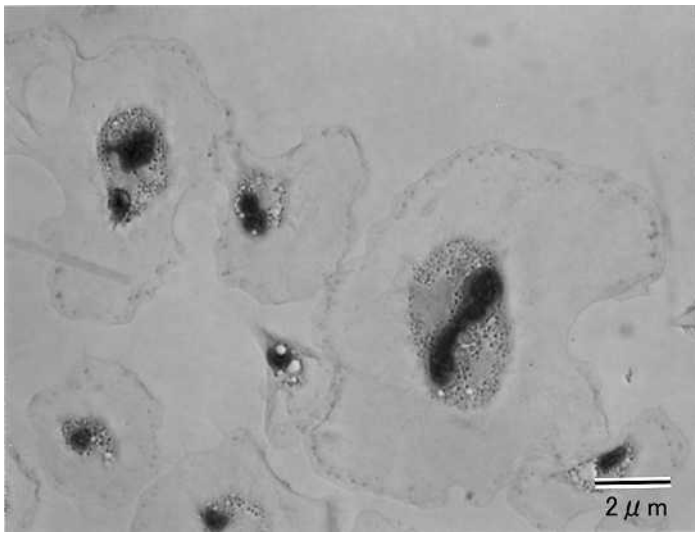


图.5.8

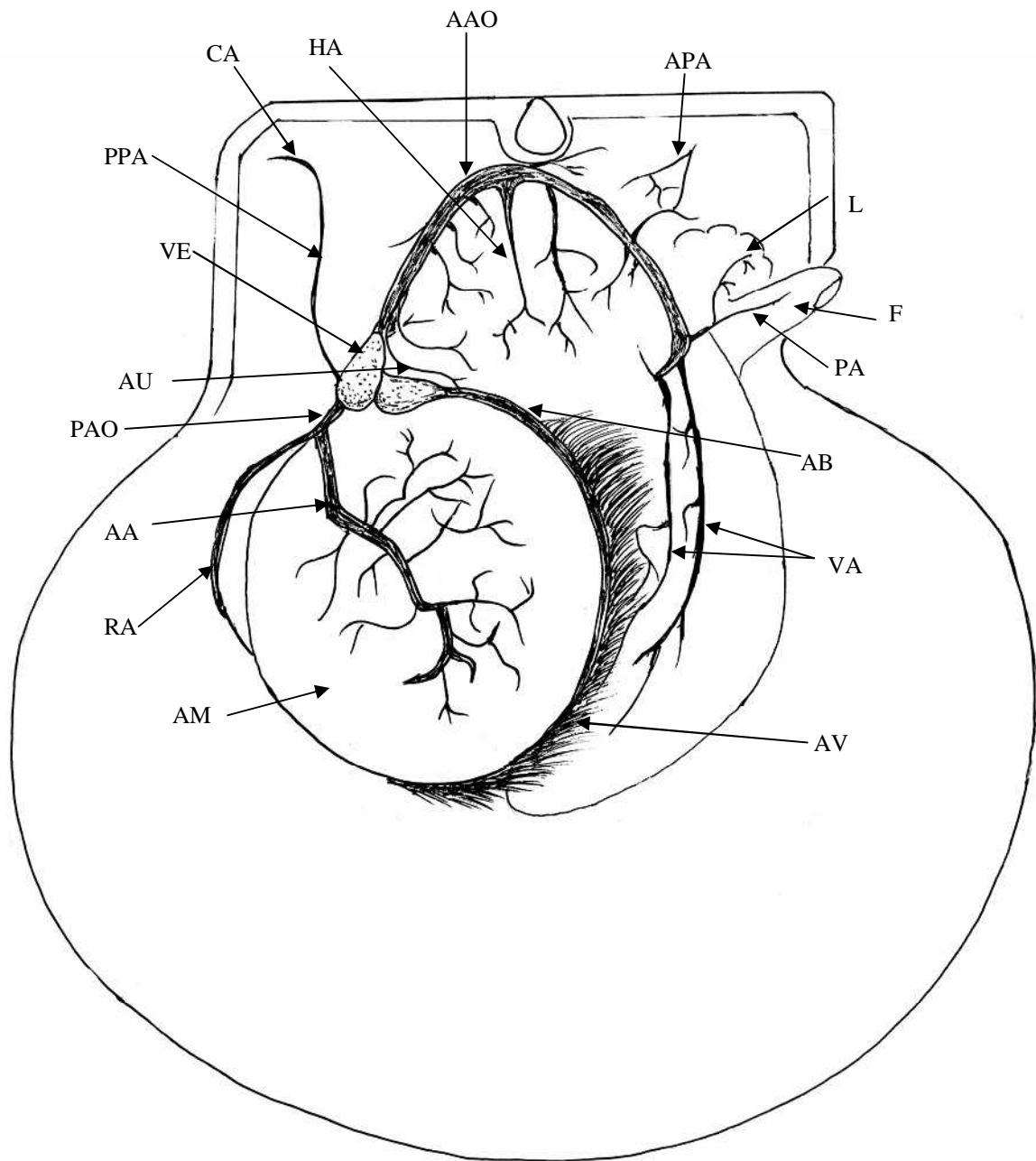


図5.9 動脈系の組織図

AA:閉殻筋動脈(adductor muscle artery), AAO:前大動脈(anterior aorta), AB:入鰓血管(afferent branchial vessel), AV:下向入鰓弁血管(afferent vessel of descending filament), AM:閉殻筋(adductor muscle), APA:前外套動脈(anterior pallial artery), AU:心房(auricle), CA:環外套動脈(circumpallial artery), F:足(foot), HA:肝動脈(hepatic artery), L:唇(lip), PA:足動脈(pedal artery), PAO:後大動脈(posterior aorta), PPA:後外套動脈(posterior pallial artery), RA:直腸動脈(rectal artery), VA:内臓動脈(visceral artery), VE:心室(ventricle)

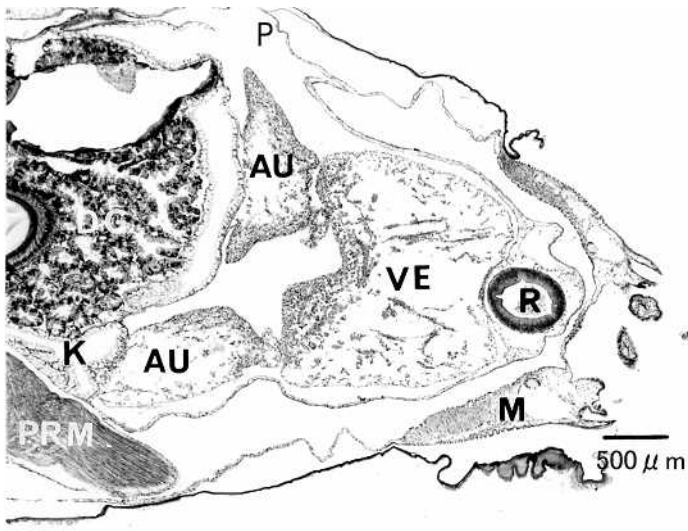


图5.10

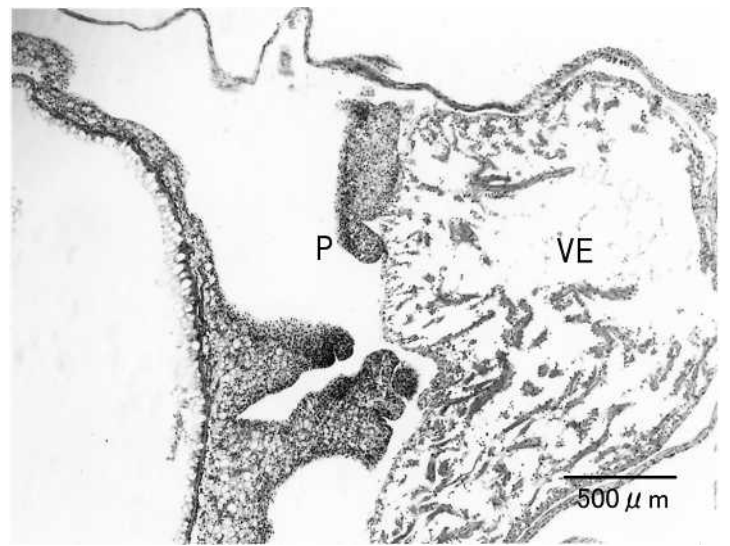


图5.11

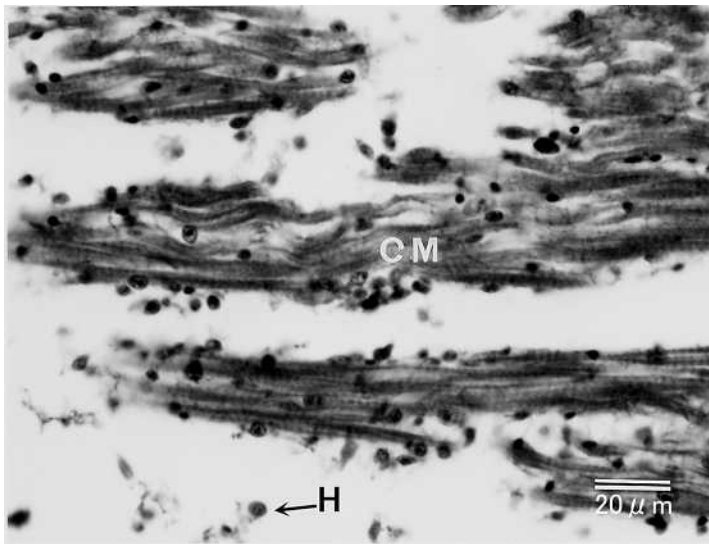


图5.12

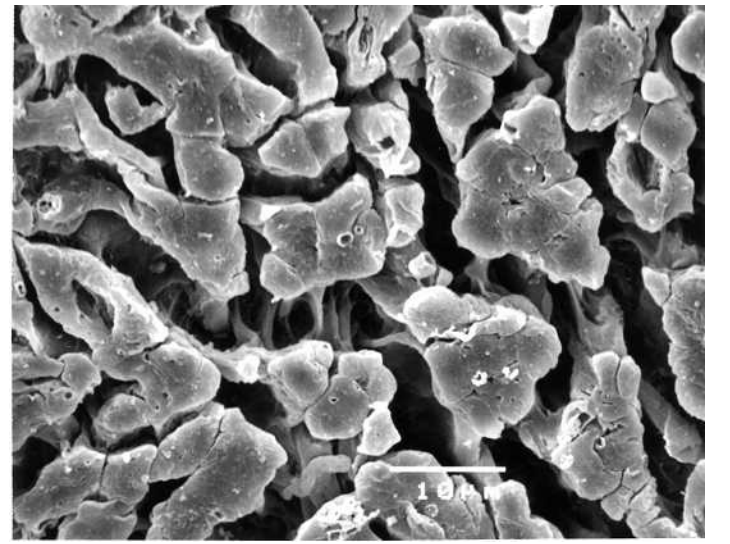


图5.13

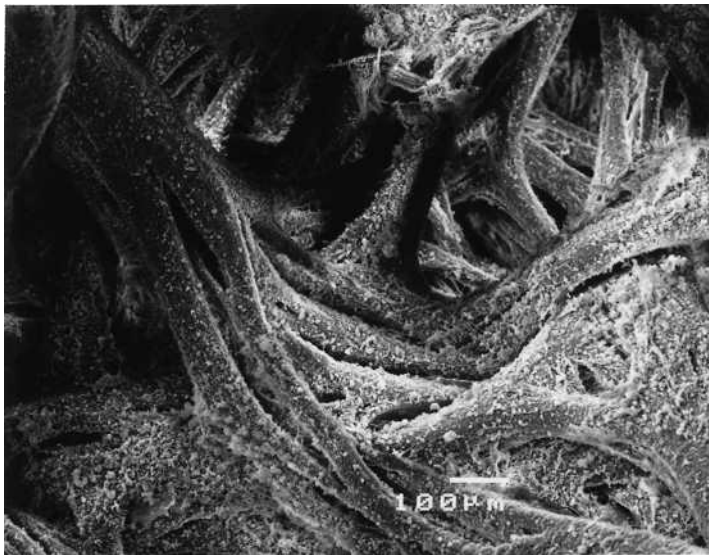


图5.14

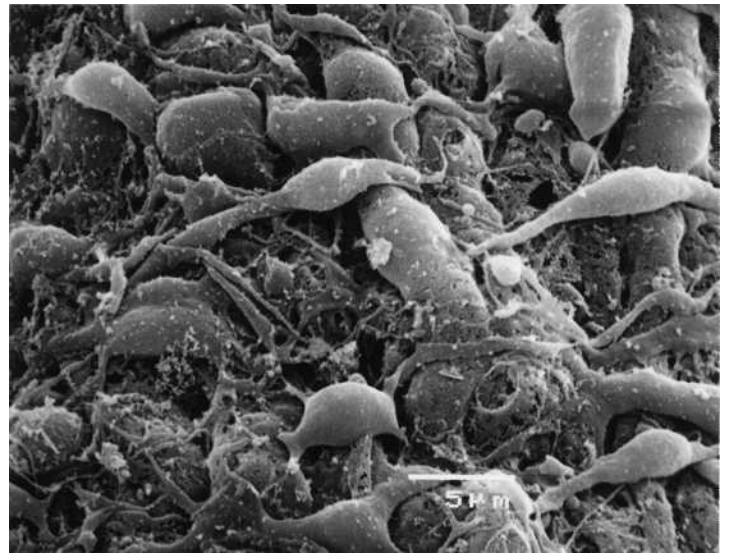


图5.15

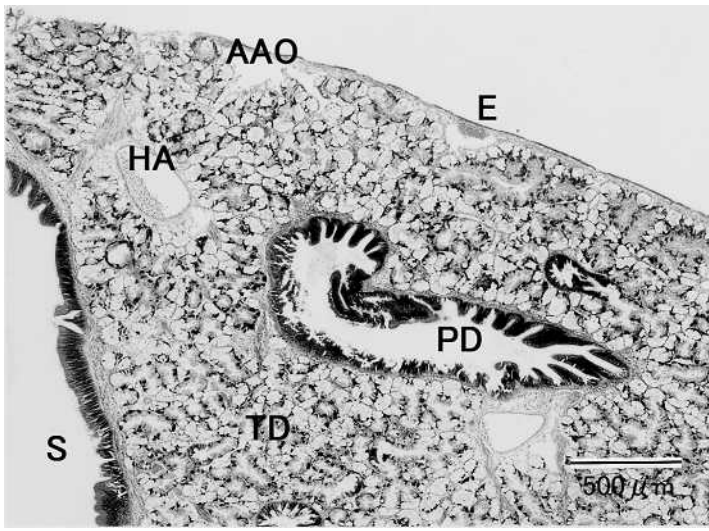


图5.16

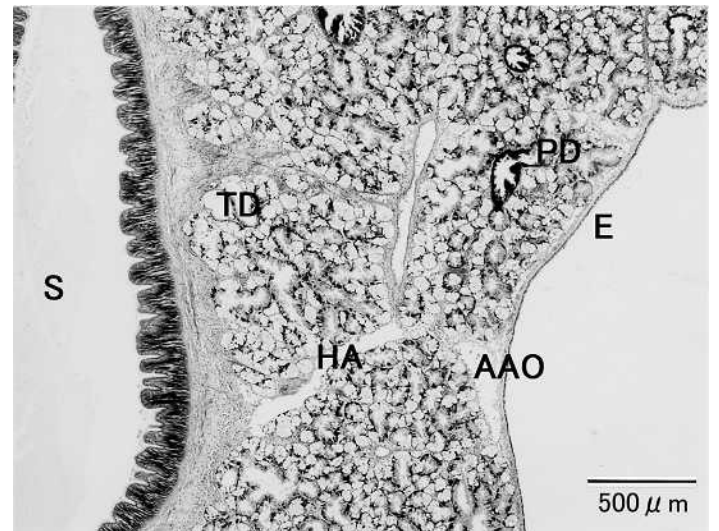


图5.17

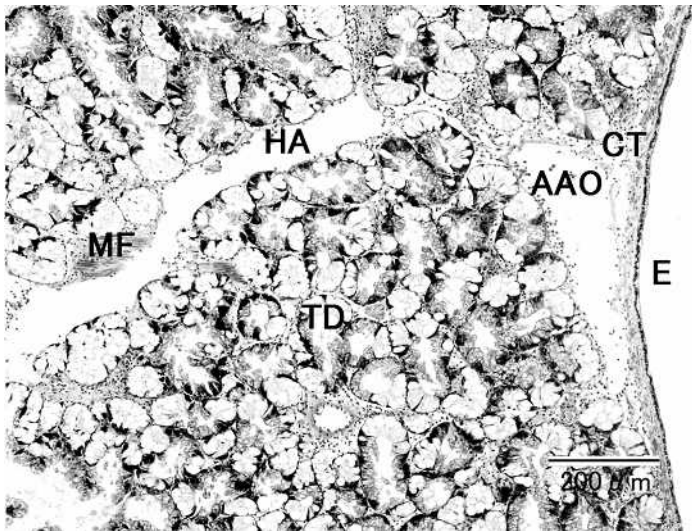


图5.18

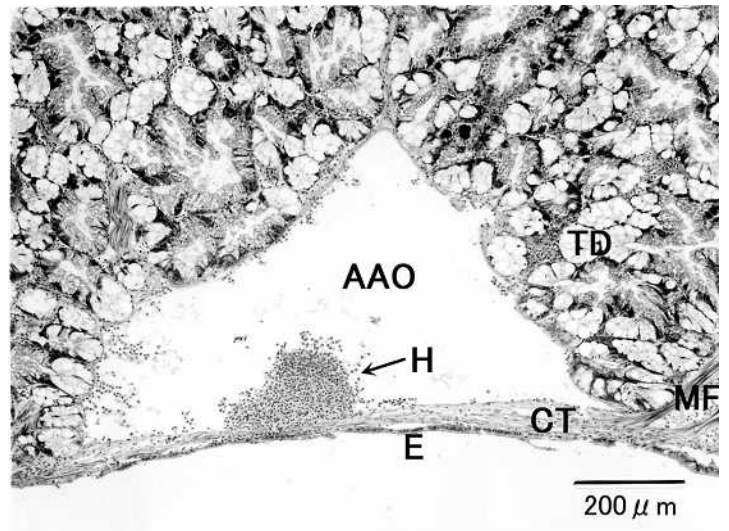


图5.19

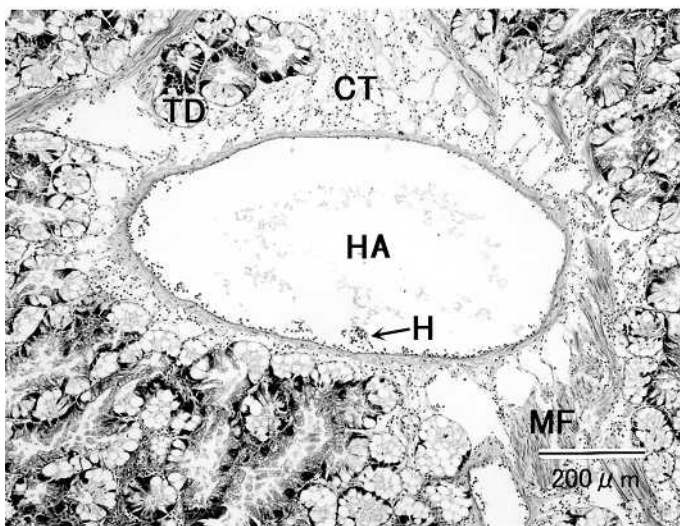


图5.20

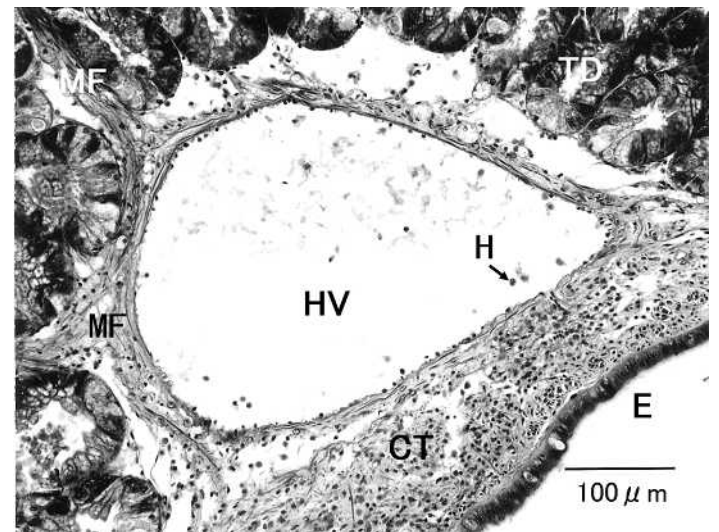


图5.21

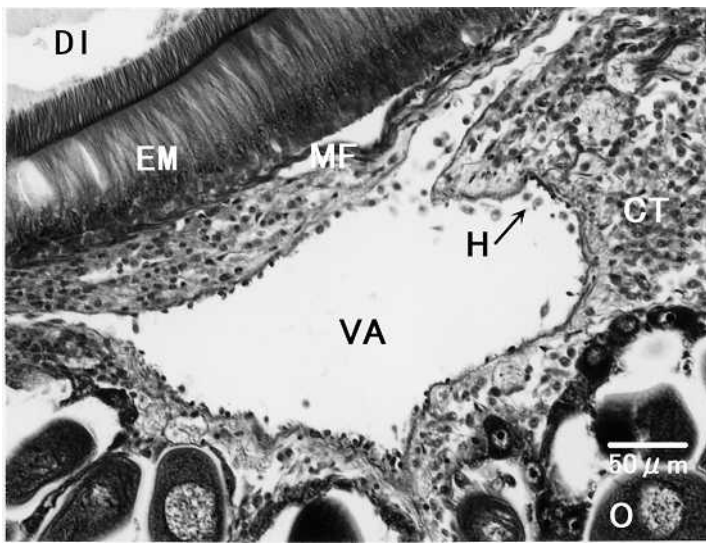


图5.22

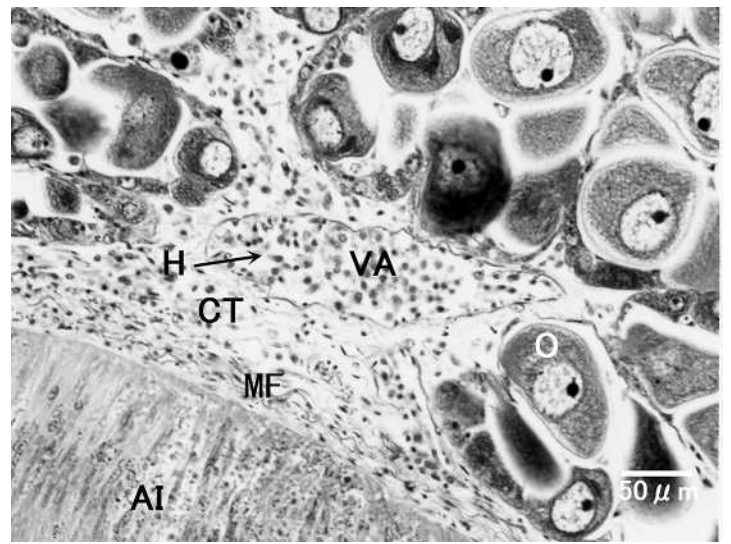


图5.23

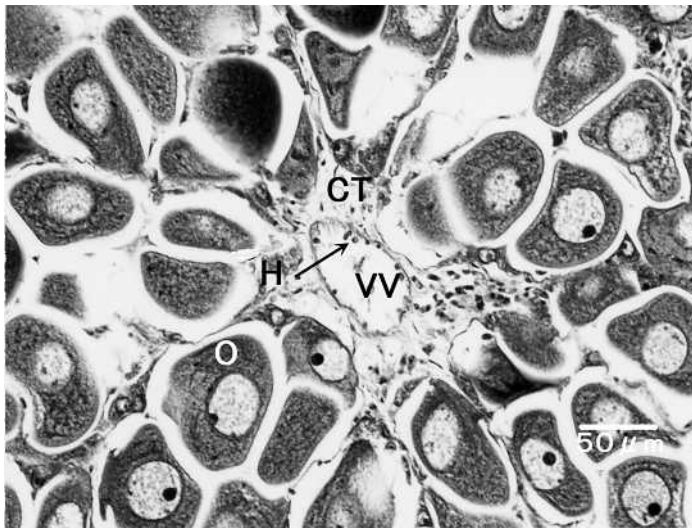


图5.24

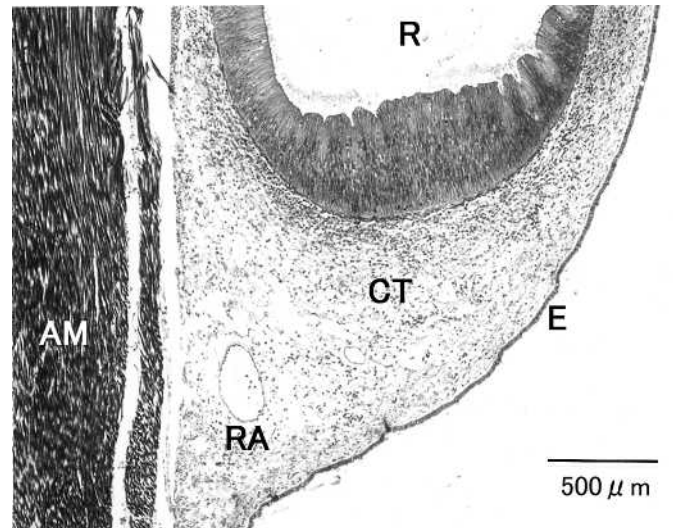


图5.25

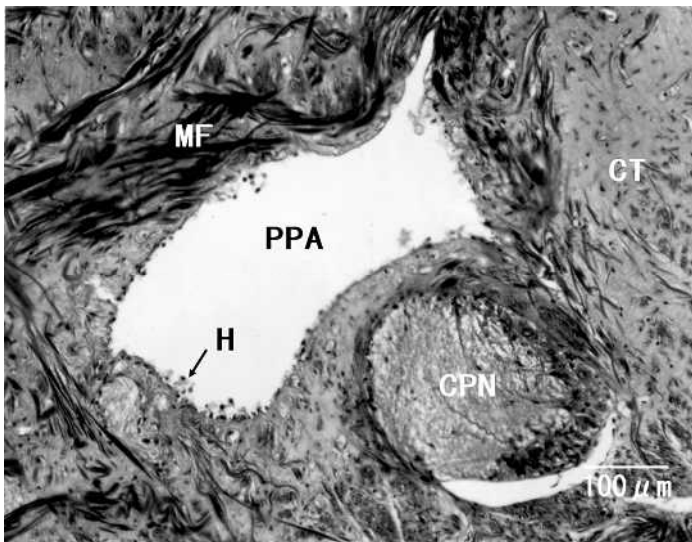


图5.26

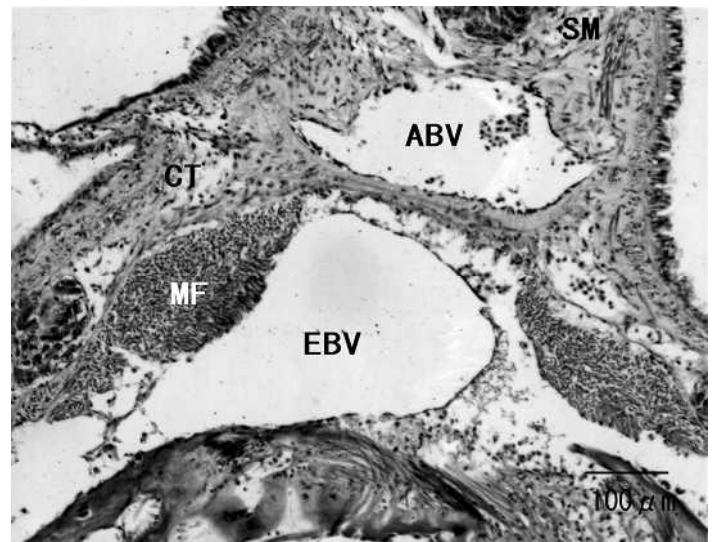


图5.27

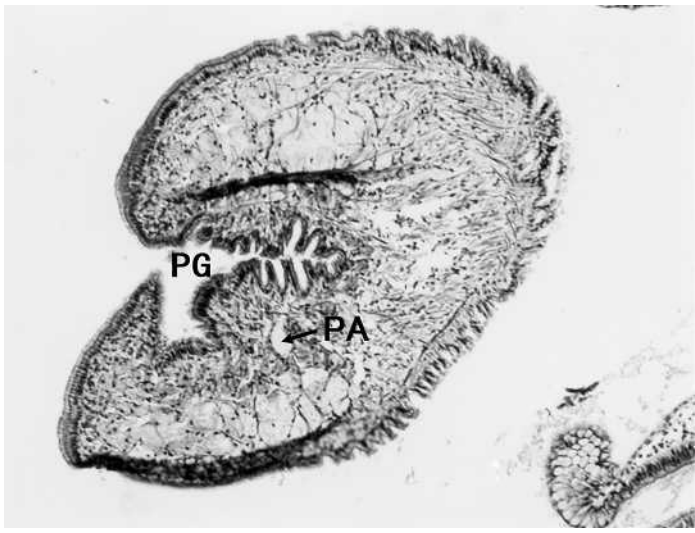


图.5.28

図.5.1. 無顆粒血球(agranular hemocyte). LP:葉状仮足(lobopodium), FP:糸状仮足(filopodium), N:核(nucleus)

図.5.2. 顆粒血球(granular hemocyte)タイプ . FP:糸状仮足(filopodium), N:核(nucleus), V:空胞(vacuole)

図.5.3. 顆粒血球(granular hemocyte)タイプ . FP:糸状仮足(filopodium), N:核(nucleus) V:空胞(vacuole)

図.5.4. 顆粒血球(granular hemocyte)タイプ . FP:糸状仮足(filopodium), N:核(nucleus)

図.5.5. 無顆粒血球(agranular hemocyte)と顆粒血球(granular hemocyte). AH:無顆粒血球(agranular hemocyte), GH :顆粒血球タイプ (granular hemocyte type), GH :顆粒血球タイプ (granular hemocyte type), FP:糸状仮足(filopodium), LP:葉状仮足(lobopodium), N:核(nucleus), RP:根状仮足(rhizopodium), V:空胞(vacuole)

図.5.6. 無顆粒血球(agranular hemocyte).

図.5.7. 顆粒血球(granular hemocyte)タイプ .

図.5.8. 顆粒血球(granular hemocyte)タイプ .

図.5.10. 心臓(heart)の組織図. AU:心房(auricle), DG:中腸腺(digestive gland), K:腎臓(kidney), M:外套膜(mantle), P:囲心腔(pericardium), PRM:足後引筋(pedal-retractor muscle), R:直腸(rectum), S:殻(shell), ST:胃(stomach), VE:心室(ventricle)

図.5.11. 心臓(heart)と囲心腔(pericardium)の組織図. VE:心室(ventricle), P:囲心腔(pericardium)

図.5.12. 心臓(heart)の筋肉(muscle). H:血球(hemocyte), CM:心筋(cardiac muscle)

図.5.13. 心臓(heart)の表皮(muscle).

図.5.14. 心臓(heart)内の心筋 (cardiac muscle).

図.5.15. 心臓(heart)内の心筋 (cardiac muscle)表面. H:血球(hemocyte), CM:心筋(cardiac muscle)

図.5.16. 中腸腺(digestive gland)内の動脈(artery)の組織像. AAO:前大動脈(anterior aorta), E:表皮(epithelium), HA:肝臓動脈(hepatic artery), PD:中腸腺主導管(principal duct of digestive gland), S:胃(stomach), TD:消化腺管(tube of digestive gland)

図.5.17. 中腸腺(digestive gland)内の動脈(artery)の組織像. AAO:前大動脈(anterior aorta), E:表皮(epithelium), HA:肝臓動脈(hepatic artery), PD:中腸腺主導管(principal duct of digestive gland), S:胃(stomach), TD:消化腺管(tube of digestive gland) , S:胃(stomach)

図.5.18. 中腸腺(digestive gland)内の動脈(artery)の組織像. AAO:前大動脈(anterior aorta), CT:結合組織(connective tissue), E:表皮(epithelium), HA: 肝臓動脈(hepatic artery), MF:筋繊維(muscle fiber), TD:消化腺管(tube of digestive gland)

図.5.19. 中腸腺(digestive gland)内の前大動脈(anterior aorta)の組織像. AAO:前大動脈(anterior aorta), CT:結合組織(connective tissue), E:表皮(epithelium), MF:筋繊維(muscle fiber), TD:消化腺管(tube of digestive gland)

図.5.20. 中腸腺(digestive gland)内の肝臓動脈(hepatic artery)の組織像. CT:結合組織(connective tis-

sue), H:血球(hemocyte), HA:肝臓動脈(hepatic artery), MF:筋繊維(muscle fiber), TD:消化腺管(tube of digestive gland)

図.5.21. 中腸腺(digestive gland)内の肝臓静脈(hepatic vein)の組織像. CT:結合組織(connective tissue), E:表皮(epithelium), H:血球(hemocyte), HV:肝臓静脈(hepatic vein), MF:筋繊維(muscle fiber), TD:消化腺管(tube of digestive gland)

図.5.22. 生殖腺(gonad)内の動脈(artery)の組織像. CT:結合組織(connective tissue), DI:下向腸(descending intestine), H:血球(hemocyte), I:腸(intestine), MF:筋繊維(muscle fiber), O:卵細胞(oocyte), TM:粘液上皮細胞(mucous epithelium), VA:内臓動脈(visceral artery)

図.5.23. 生殖腺(gonad)内の動脈(artery)の組織像. AI:上向腸(ascending intestine), CT:結合組織(connective tissue), H:血球(hemocyte), MF:筋繊維(muscle fiber), O:卵細胞(oocyte), VA:内臓動脈(visceral artery)

図.5.24. 生殖腺(gonad)内の静脈(vein). C:結合組織(connective tissue), H:血球(hemocyte), O:卵細胞(oocyte), VV:内臓静脈(visceral vein)

図.5.25. 直腸(rectum)内の動脈(rectal artery)の組織像. AD:閉殻筋(adductor muscle), CT:結合組織(connective tissue), E:表皮(epithelium), R:直腸(rectum), RV:直腸動脈(rectal artery)

図.5.26. 外套膜(mantle)内の外套動脈(pallial artery)の組織像. CT:結合組織(connective tissue), CPN:環外套神経(circum pallial nerve), MF:神経線維(muscle fiber), PPA:後外套動脈(posterior pallial artery)

図.5.27. 鰓(gill)内の血管(vessels)の組織像. ABV:入鰓血管(afferent branchial vessel), 出鰓血管(efferent branchial vessel), MF:神経線維(muscle fiber)

図.5.28. 足(foot)内の足動脈(pedal artery)の組織像. PDA:足動脈(pedal artery), PG:足系溝(pedal groove)