

# 4.消 化 器 系

## ( Digestive system)

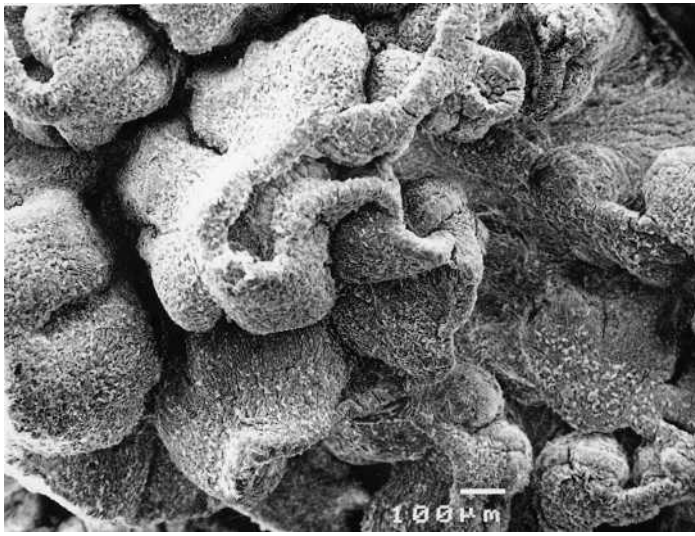


图4.2

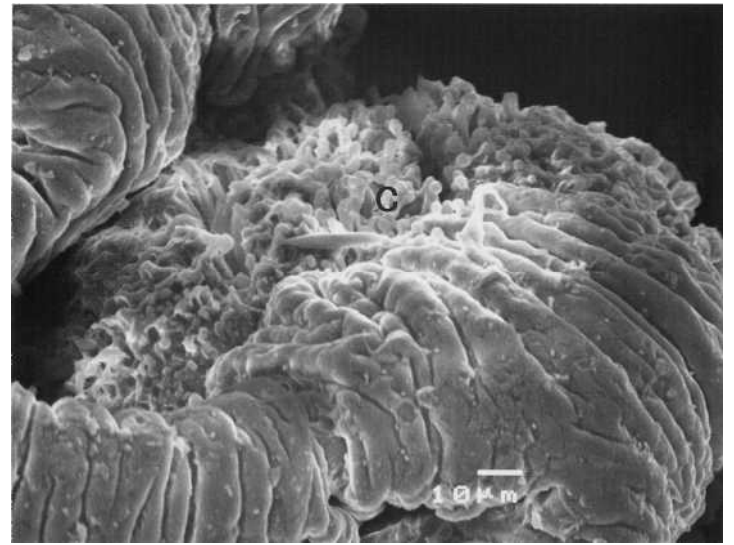


图4.3

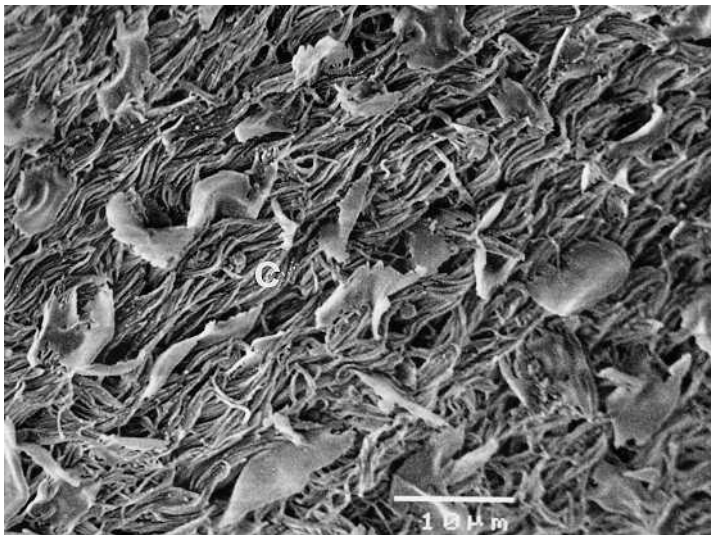


图4.4

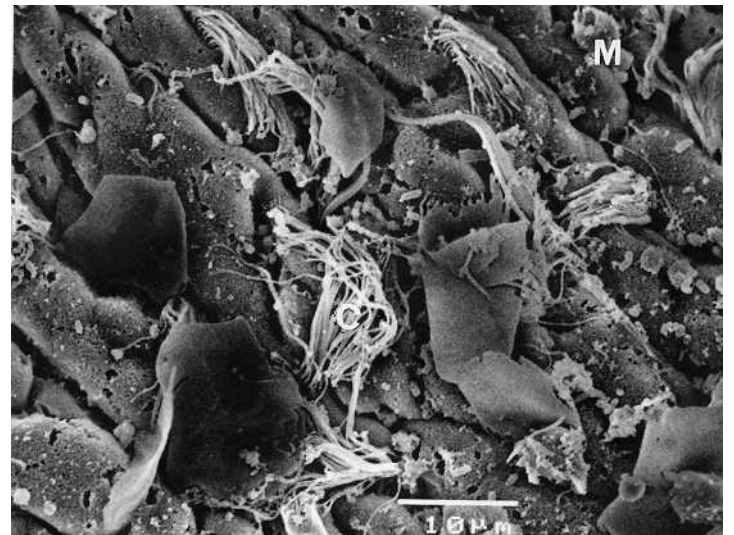


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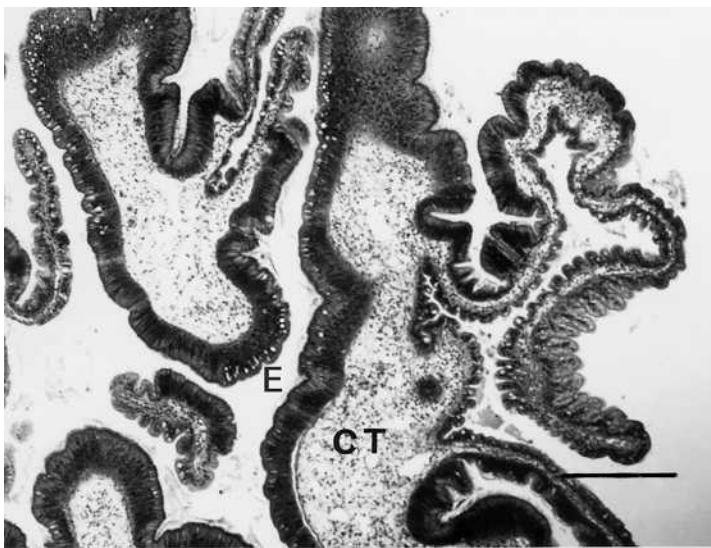


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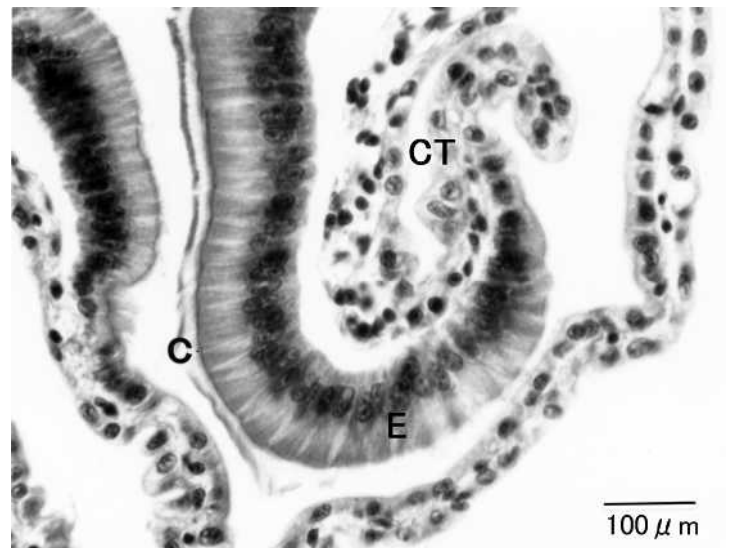


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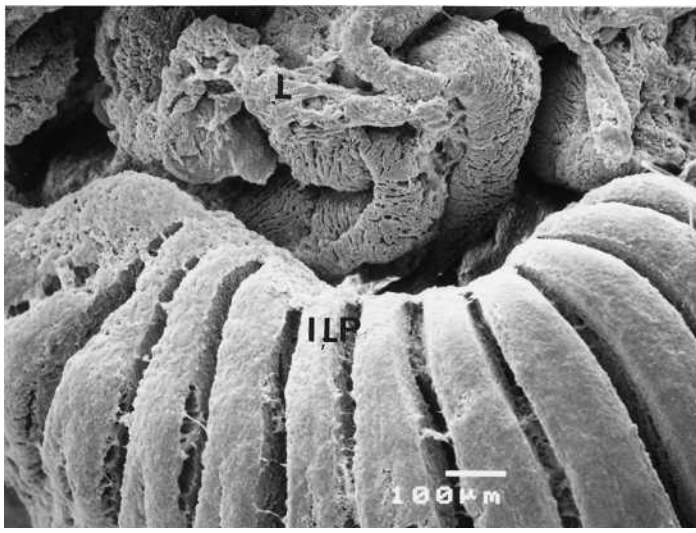


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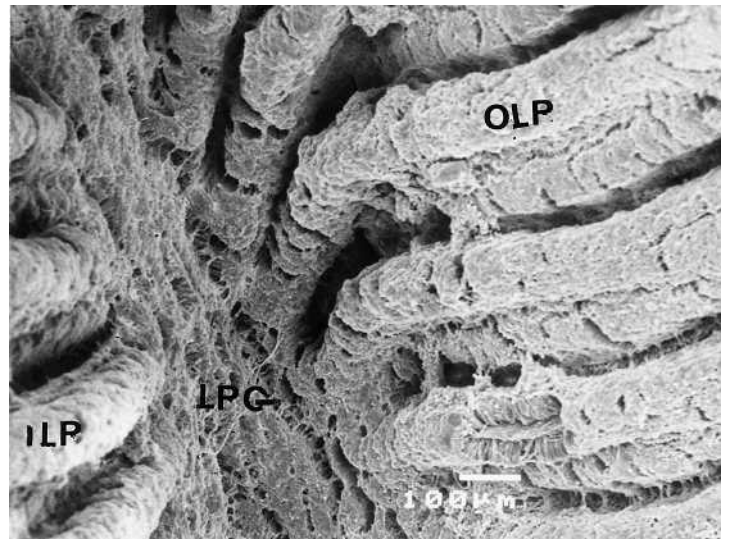


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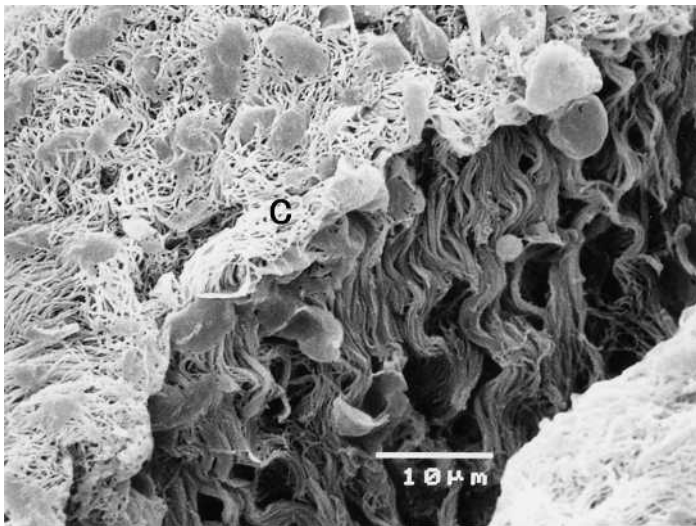


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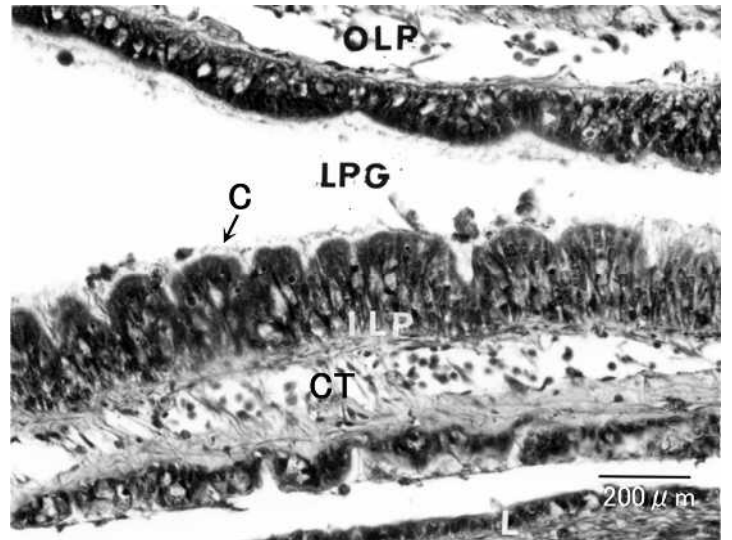


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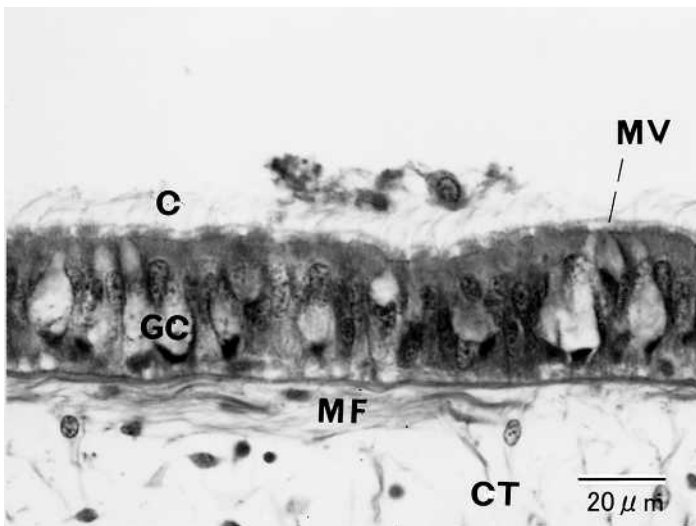


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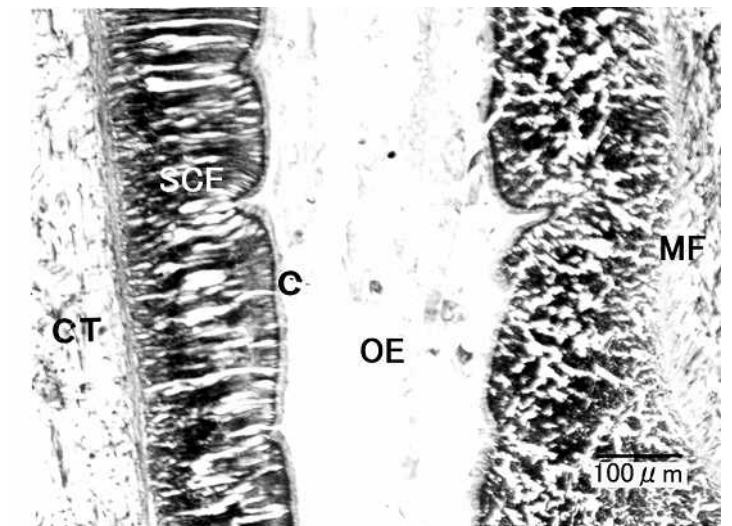


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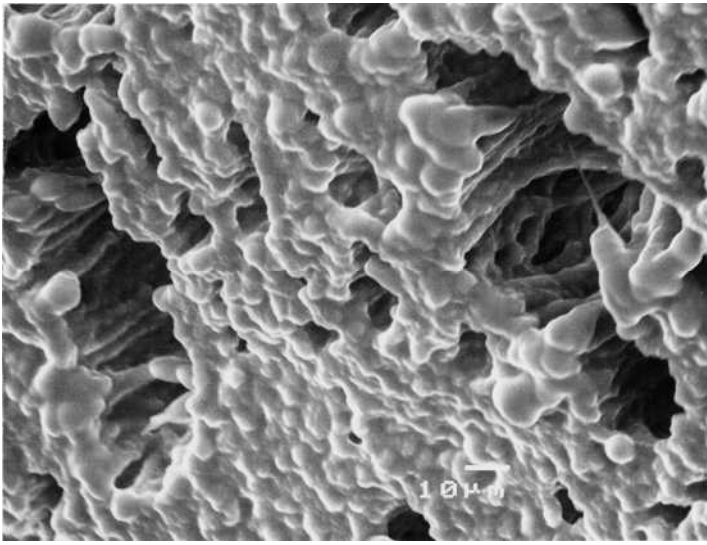


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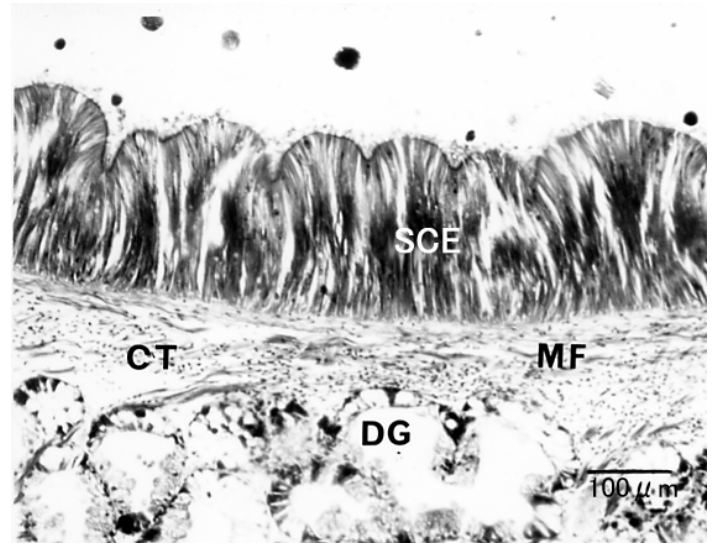


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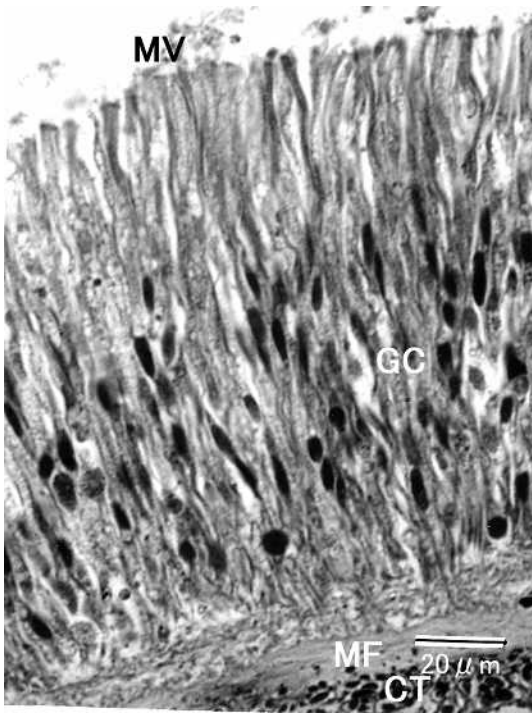


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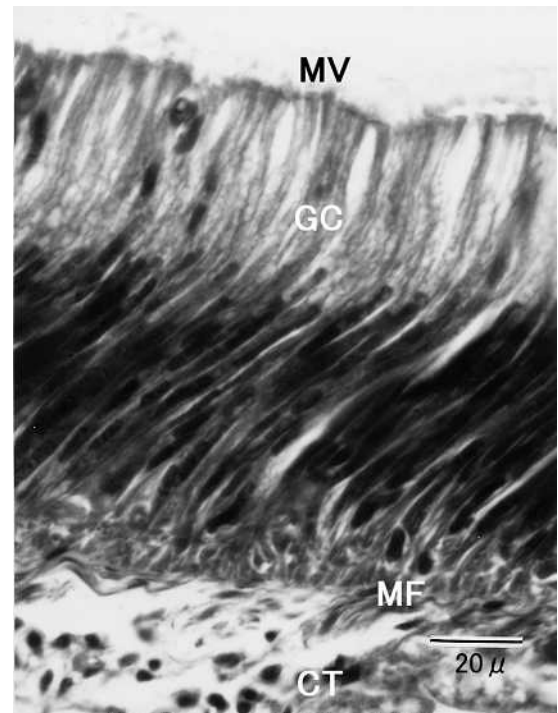


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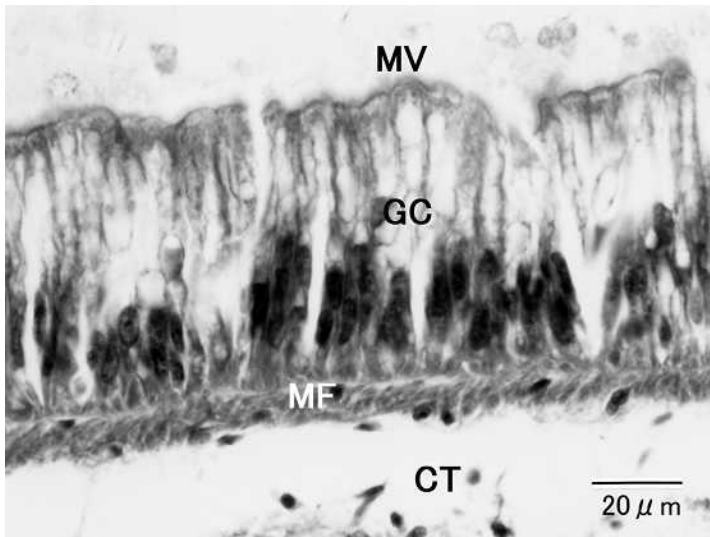


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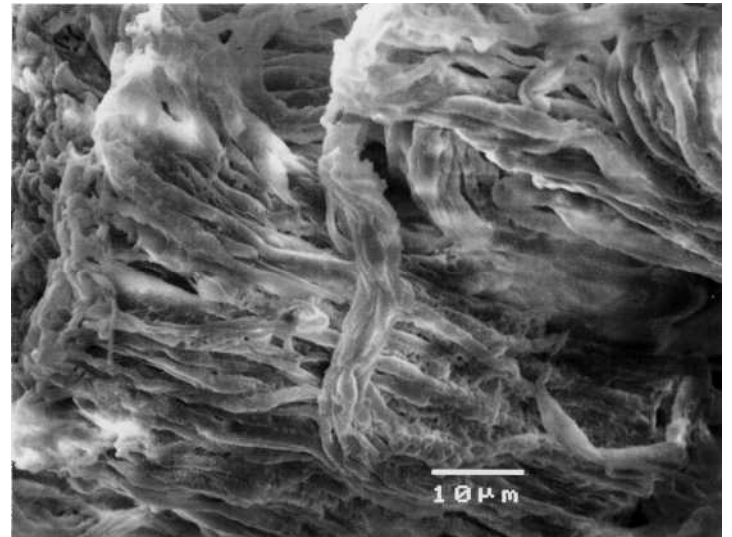


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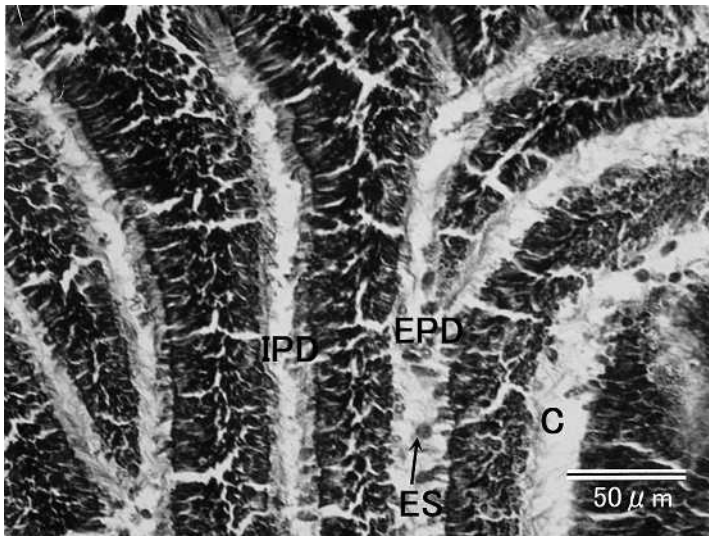


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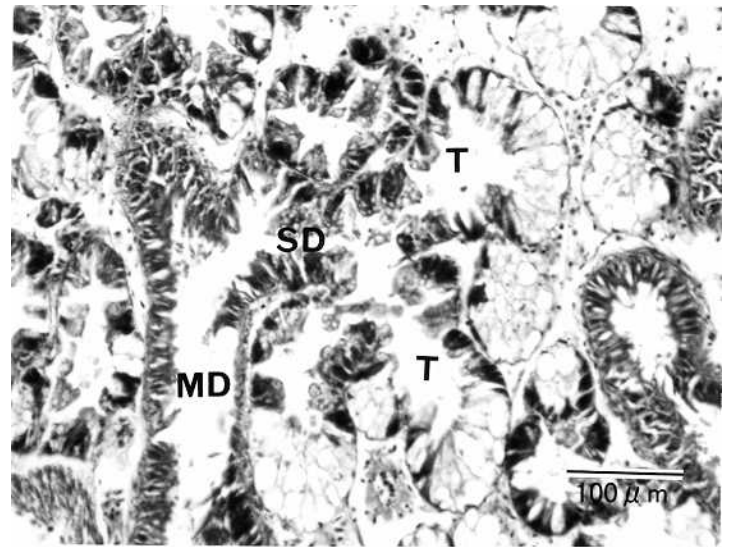


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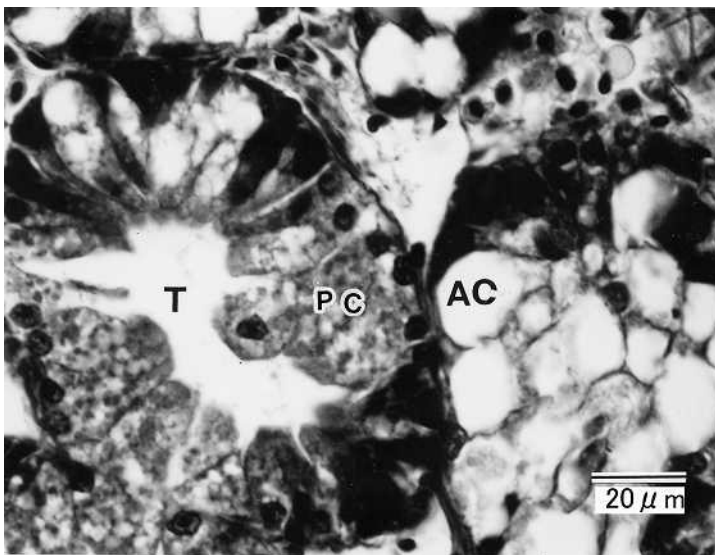


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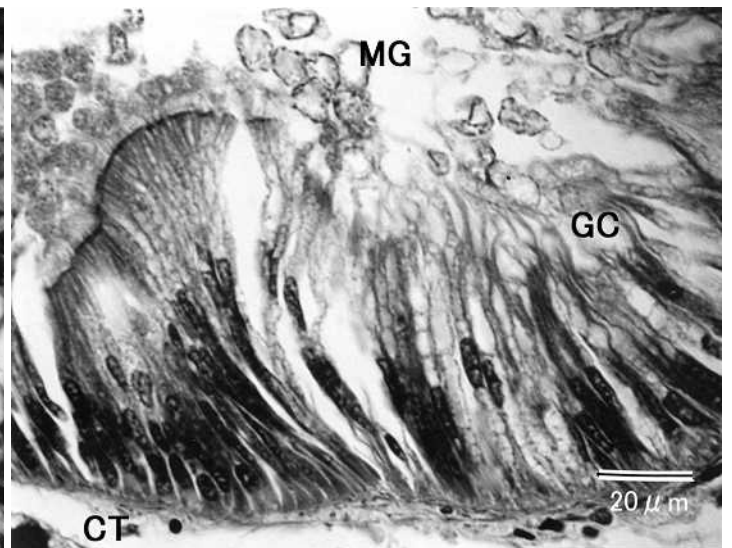


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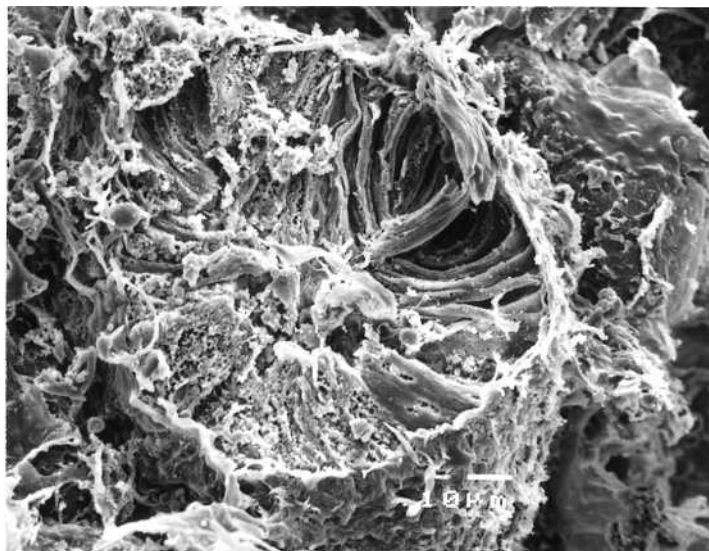


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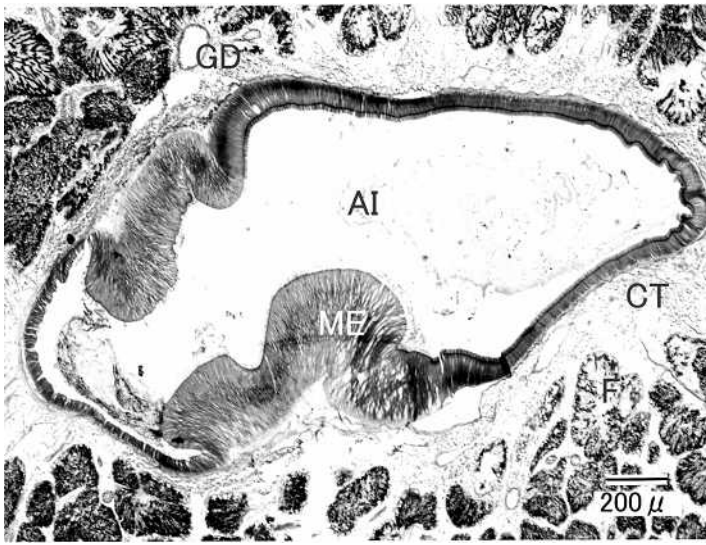


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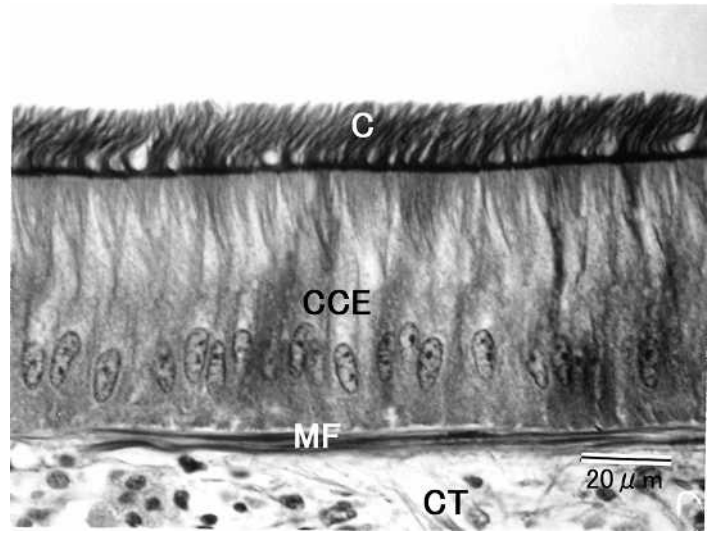


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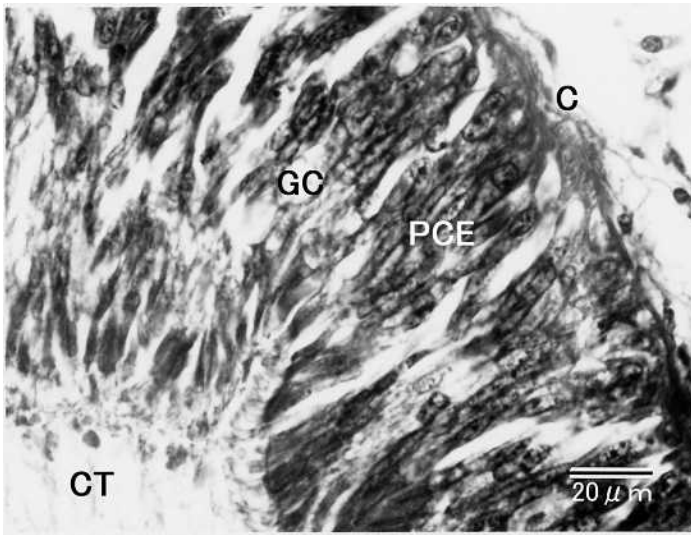


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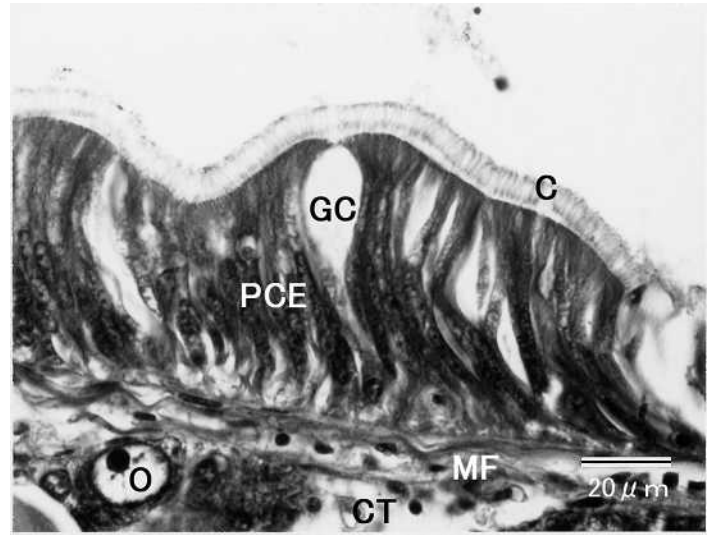


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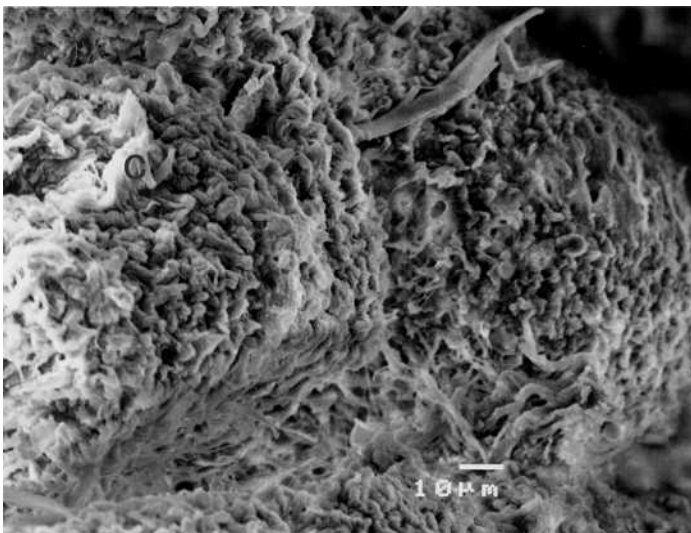


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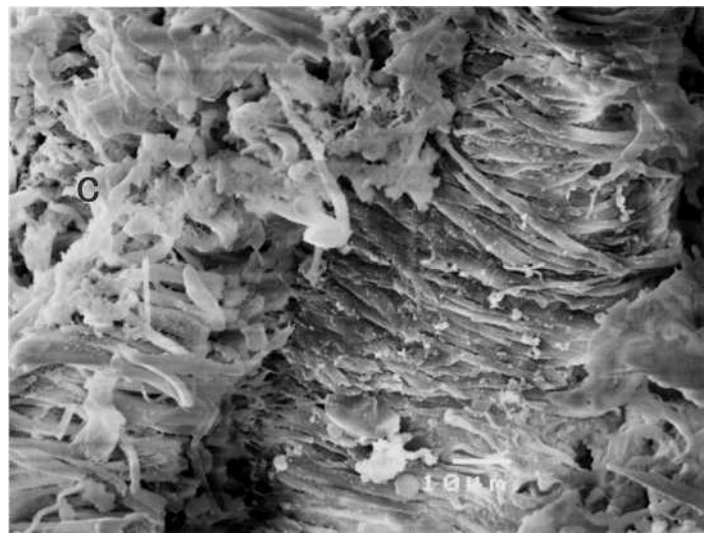


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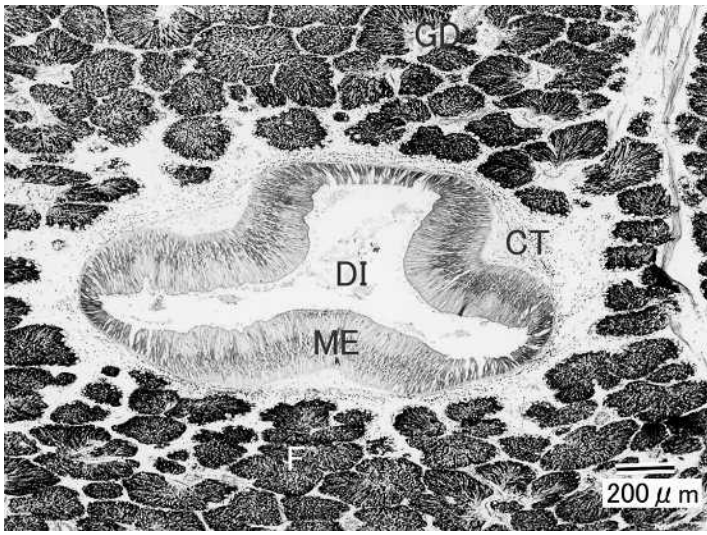


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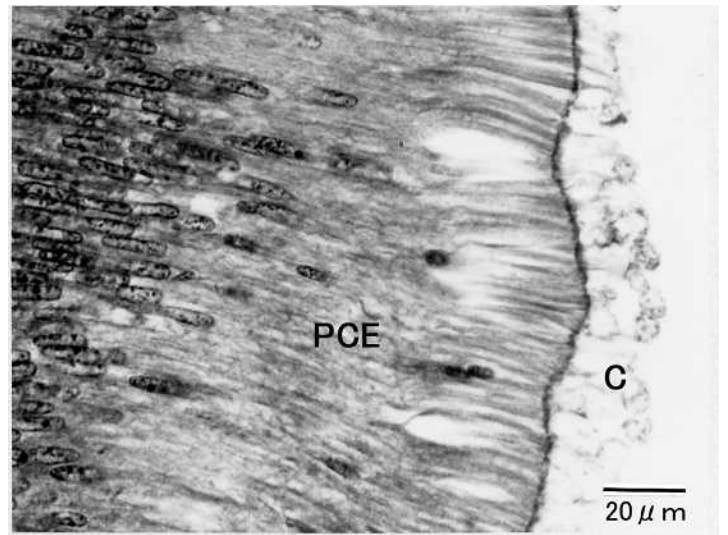


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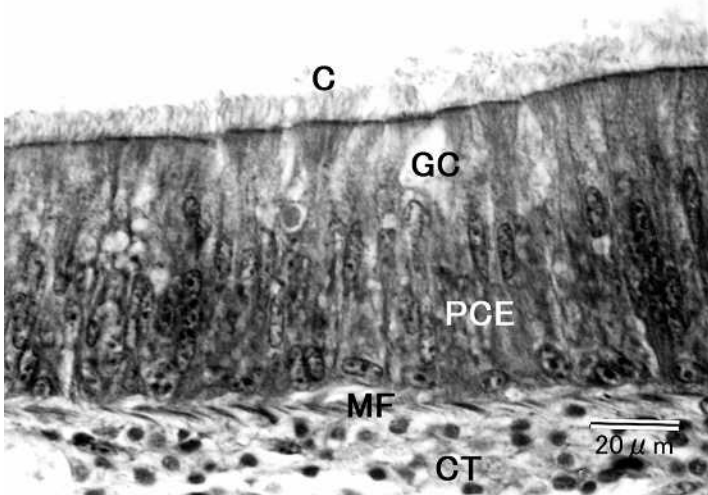


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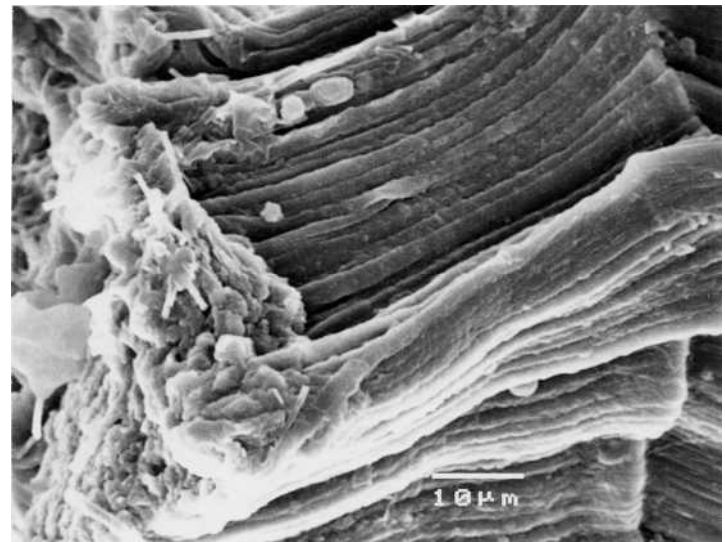


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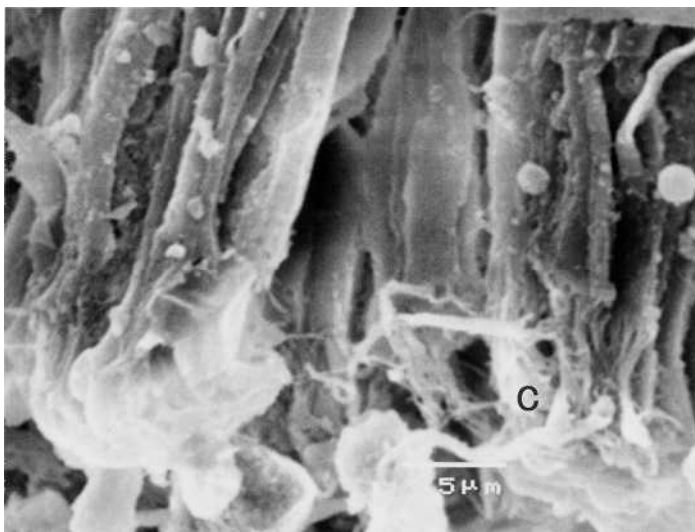


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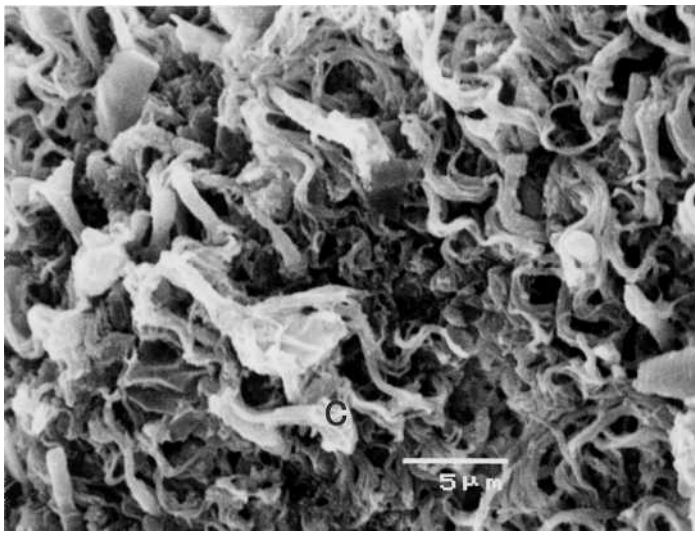


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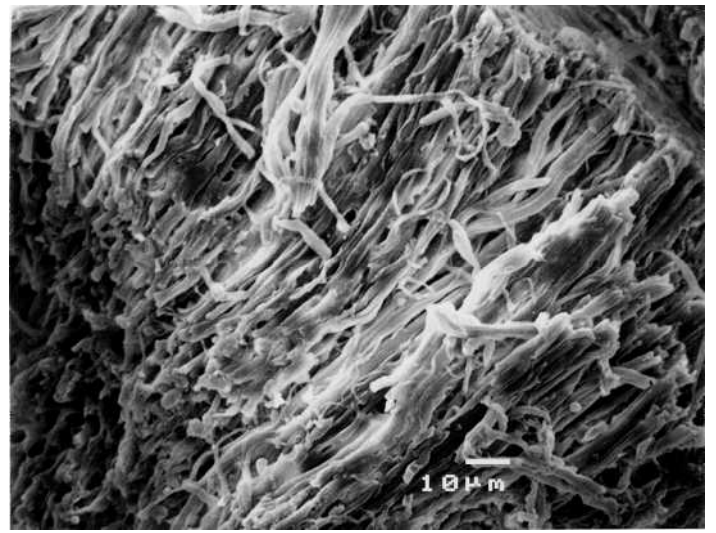


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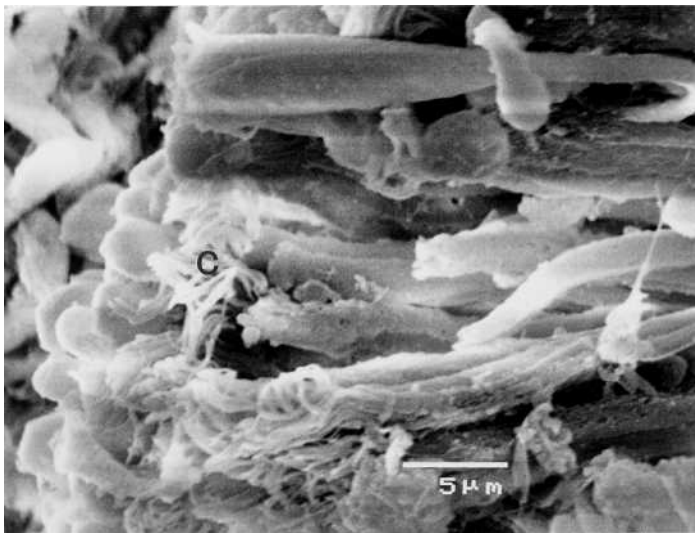


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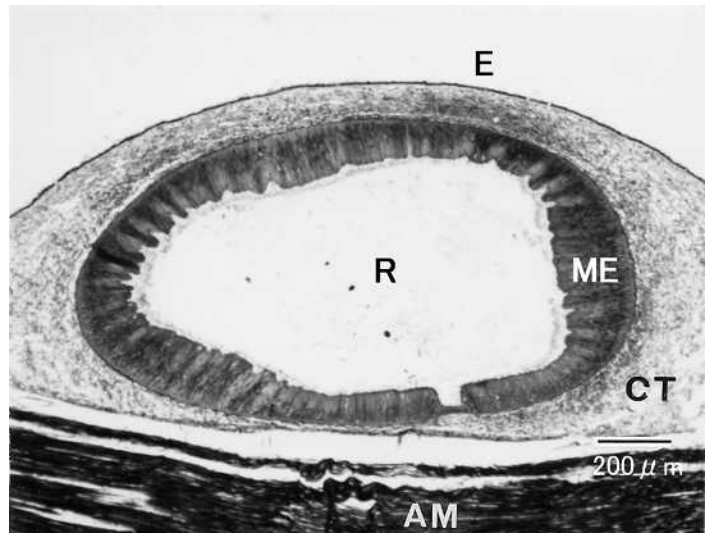


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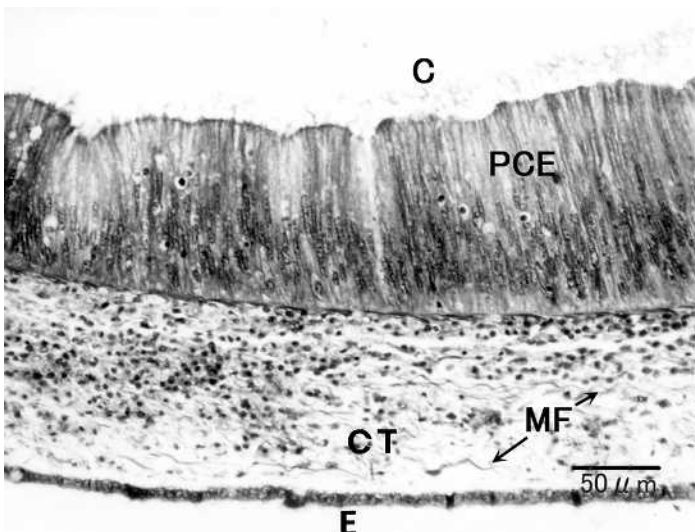


图4.40



图4.41



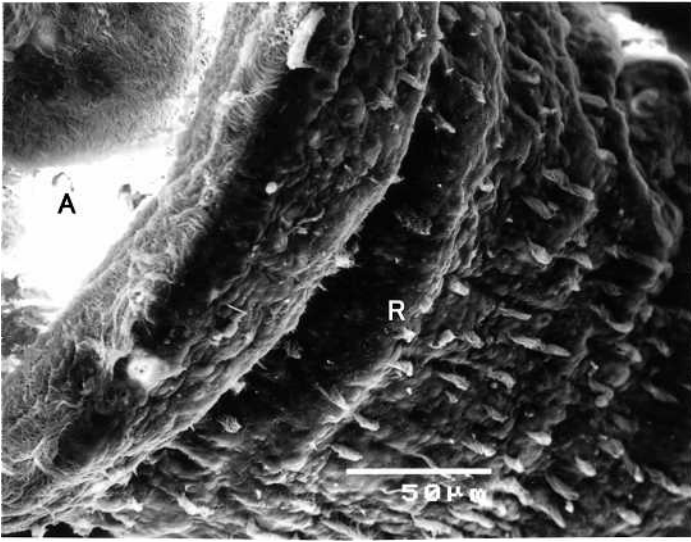


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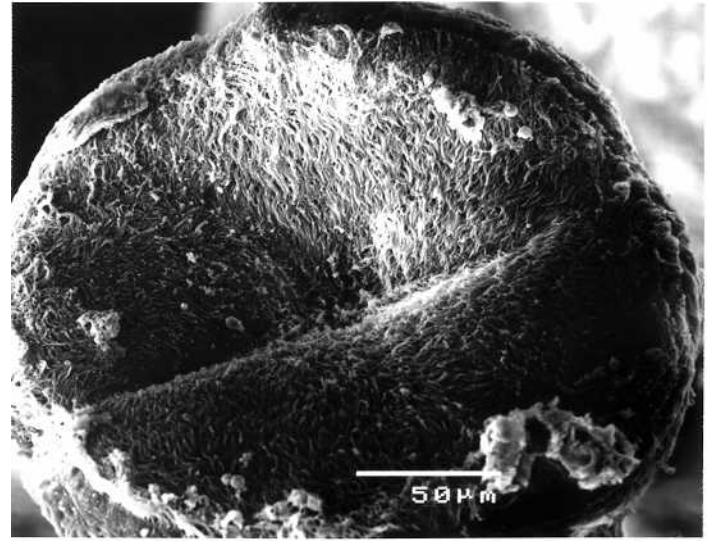


图4.43

図4.2. 唇(lip)の電顕像.

図4.3. 唇(lip)先端の電顕像. C:繊毛(cilia)

図4.4. 唇(lip)の電顕像. C:繊毛(cilia)

図4.5. 唇(lip)の電顕像. C:繊毛(cilia), M:粘液ボール(mucus ball)

図4.6. 唇(lip)の組織図. CT:結合組織(connective tissue), E:表皮(epithelium)

図4.7. 唇(lip)の表皮(epithelium)の組織図. C:繊毛(cilia), CT:結合組織(connective tissue), E:表皮(epithelium)

図4.8. 唇弁(labial palp)と唇(lip)の電顕像. ILP:内唇弁(inner labial palp), 唇(lip)

図4.9. 唇弁(labial palp)と唇弁溝(labial palp groove)の電顕像. ILP:内唇弁(inner labial palp), OLP外唇弁(outer labial palp), LPG:唇弁溝(labial palp groove)

図4.10. 唇弁(labial palp)電顕像の電顕像. C:繊毛(cilia)

図4.11. 唇弁(labial palp)の組織図. C:繊毛(cilia), CT:結合組織(connective tissue), L:唇(lip), LPG:唇弁溝(labial palp groove), OLP外唇弁(outer labial palp)

図4.12. 唇弁(labial palp)の表皮(epithelium)組織図. C:繊毛(cilia), CT:結合組織(connective tissue), GC:杯細胞(goblet cell), MF:筋繊維(muscle fiber), MV:微絨毛(microvilli)

図4.13. 食道(oesophagus)の組織図. C:繊毛(cilia), CT:結合組織(connective tissue), MF:筋繊維(muscle fiber), OE:食道(oesophagus), SCE:単層円柱細胞(simple columnar epithelium)

図4.14. 食道(oesophagus)表面の電顕像.

図4.15. 胃(stomach)の組織図1. CT:結合組織(connective tissue), DG:中腸腺管(duct of digestive gland), MF:筋繊維(muscle fiber), SCE:単層円柱細胞(simple columnar epithelium)

図4.16. 顆粒形成期の胃(stomach)の組織図2. GC:多列上皮(pseudostratified epithelium)からなる杯細胞(goblet cell). CT:結合組織(connective tissue), MF:筋繊維(muscle fiber), MV:微絨毛(microvilli)

図4.17. 顆粒充満期の胃(stomach)の組織図3. GC:多列上皮(pseudostratified epithelium)からなる杯細胞(goblet cell). CT:結合組織(connective tissue), MF:筋繊維(muscle fiber), MV:微絨毛(microvilli)

図4.18. 顆粒放出後の胃(stomach)の組織図4. GC:多列上皮(pseudostratified epithelium)からなる杯細胞(goblet cell). CT:結合組織(connective tissue), MF:筋繊維(muscle fiber)

図4.19. 胃(stomach)表面の電顕像.

図4.20. 胃につながっている中腸腺導管(principal duct of digestive gland)の組織図. C:繊毛(cilia), EPD:出主導管(exhalant principal duct), ES:排泄球(excretory spheres), IPD:入主導管(inhalant principal duct)

図4.21. 中腸腺(digestive gland)内の組織図. MD:主導管(main duct), SD:二次消化腺導管(secondary duct of digestive gland), T:中腸腺小管(tubules of digestive gland)

図4.22. 中腸腺小管(tubules of digestive gland)内の組織図. AC:脂肪細胞(adipocyte), PC:喰細胞(phagocyte), T:小管(tubule)

図.4.23. 二次消化腺導管(secondary duct of digestive gland)の組織図. CT:結合組織(connective tissue), GC:杯細胞(goblet cell), MG:粘液原顆粒(mucigen granule)

図.4.24. 二次消化腺導管(secondary duct of digestive gland)表面の電顕像

図.4.25. 下向腸(descending intestine)の組織図. DI:下向腸(descending intestine), CT:結合組織(connective tissue), F:濾胞(follicle), GD:生殖腺管(gonaduct), ME:粘膜上皮(mucosa epithelium)

図.4.26. 下向腸(descending intestine)の粘膜上皮(mucous epithelium)1の組織図. C:繊毛(cilia), PCE:多列繊毛円柱上皮(pseudostratified ciliated columnar epithelium)

図.4.27. 下向腸(descending intestine)の粘膜上皮(mucous epithelium)2の組織図. C:繊毛(cilia), CT:結合組織(connective tissue), GC:杯細胞(goblet cell), PCE:多列繊毛円柱上皮(pseudostratified ciliated columnar epithelium), MF:筋繊維(muscle fiber)

図.4.28. 下向腸(descending intestine)の粘膜上皮(mucous epithelium)の電顕像. C:繊毛(cilia)

図.4.29. 下向腸(descending intestine)の粘膜上皮(mucous epithelium)の電顕像. C:繊毛(cilia)

図.4.30. 上向腸(ascending intestine)の組織図. CT:結合組織(connective tissue), AI: 上向腸(ascending intestine), F:濾胞(follicle), GD:生殖腺管(gonaduct), ME:粘膜上皮(mucous epithelium), TM:粘膜上皮(mucous epithelium)

図.4.31. 上向腸(ascending intestine)の粘膜上皮(mucous epithelium)1の組織図. CCE:繊毛円柱上皮(ciliated columnar epithelium), CT:結合組織(connective tissue), MF:筋繊維(muscle fiber)

図.4.32. 上向腸(ascending intestine)の粘膜上皮(mucous epithelium)2の組織図. C:繊毛(cilia), CT:結合組織(connective tissue), GC:杯細胞(goblet cell), MF:筋繊維(muscle fiber), PCE:多列繊毛円柱上皮(pseudostratified ciliated columnar epithelium)

図.4.33. 上向腸(ascending intestine)の粘膜上皮(mucous epithelium)3の組織図. C:繊毛(cilia), CT:結合組織(connective tissue), GC:杯細胞(goblet cell), O:卵細胞(oocyte), PCE:多列繊毛円柱上皮(pseudostratified ciliated columnar epithelium)

図.4.34. 上向腸(ascending intestine)の粘膜上皮(mucous epithelium)の電顕像. C:繊毛(cilia)

図.4.35. 上向腸(ascending intestine)の粘膜上皮(mucous epithelium)の電顕像. C:繊毛(cilia)

図.4.36. 繊毛の多い下向腸(descending intestine)の粘膜上皮(mucous epithelium)の電顕像. C:繊毛(cilia)

図.4.37. 繊毛の少ない下向腸(descending intestine)の粘膜上皮(mucous epithelium)の電顕像.

図.4.38. 繊毛の少ない下向腸(descending intestine)の粘膜上皮(mucous epithelium)の電顕像. C:繊毛(cilia)

図.4.39. 直腸(rectum)の組織図. AD:閉殻筋(adductor muscle), CT:結合組織(connective tissue), E:上皮(epithelium), ME:粘膜上皮(mucous epithelium), R:直腸(rectum)

図.4.40. 直腸(rectum)の粘膜上皮(mucous epithelium)の組織図. C:繊毛(cilia), CT:結合組織(connective tissue), E:上皮(epithelium), MF:筋繊維(muscle fiber), PCE:多列繊毛円柱上皮(pseudostratified ciliated columnar epithelium)

図.4.41. 直腸(rectum)内部の粘液上皮細胞(mucous epithelium)表面の電顕像.

図.4.42. 直腸(rectum)表面の電顕像. A:肛門(anus), R:直腸(rectum)

図.4.43. 肛門(anus)の粘膜上皮(muousepithelium)表面の電顕像.