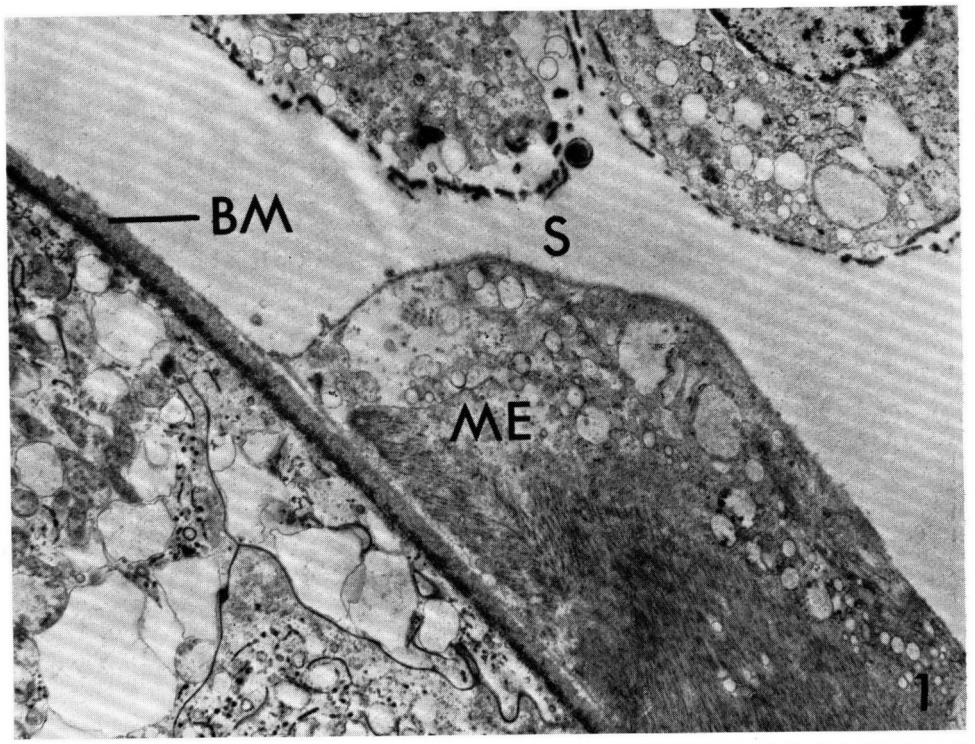
BM
S
ME
1

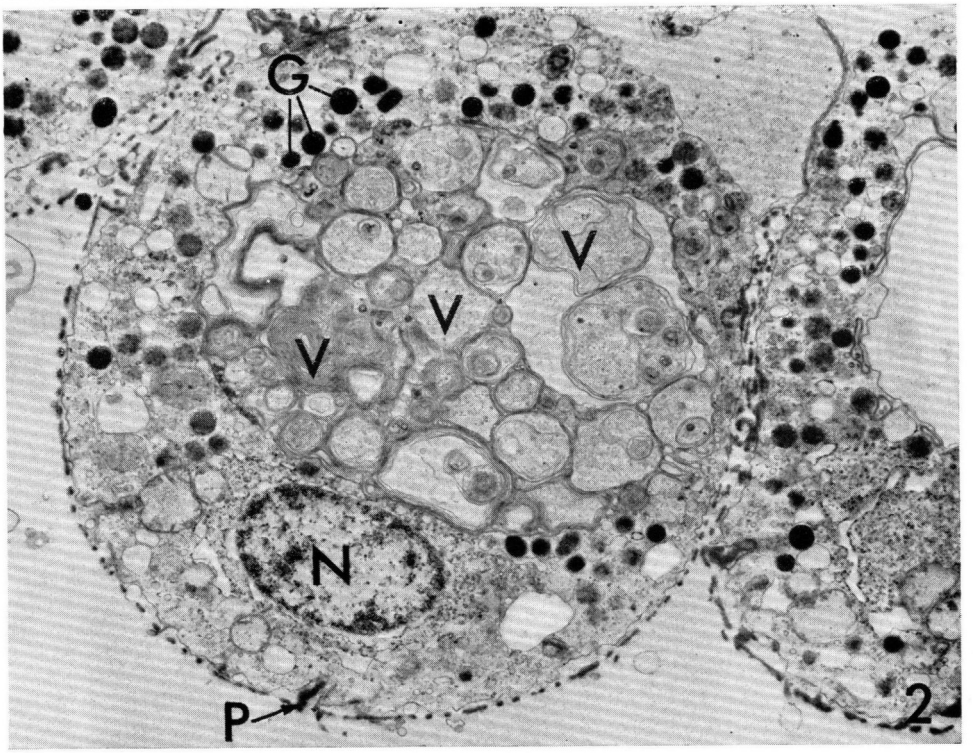
G
V
V
V
N
P
2

Plate III

Tip of tubule showing E-cells with apical microvilli (MV), small spherical mitochondria (M), fairly loose endoplasmic reticulum (ER) and a few electron-dense intravacuolar structures (DB). Lu, lumen of tubule; N, nucleus of E-cell; G, Golgi zone (× 5,500 approx.).

Plate IV

Basal portion of F-cell between two R-cells. Note abundant endoplasmic reticulum (ER) in F-cell, lipid (L) and vacuoles (V) in R-cells. BM, basement membrane; M, mitochondria (× 5,500 approx.).

Plate V

R-cells containing lipid droplets (L) are flanked by F-cells (F_1, F_2). Note the small calcium particles (Ca_1) which when larger are chipped out by sectioning, leaving holes (Ca_2). In cell F_2 a small secretory vacuole (V) is starting to form. N, nucleus (× 5,500 approx.).

Plate VI

Fig. 1. Three F-cells bordering lumen (Lu). The central cell may be extra dark because of the angle at which it is lying, or because it is in a post-secretory phase. M, mitochondria; MV, microvilli; VCa, vacuole containing calcium (× 4,400 approx.).

Fig. 2. Secretory vacuoles (V) in different stages of development in F-cells. Note abundant endoplasmic reticulum (ER) surrounding vacuoles (× 4,400 approx.).

Plate VII

Fig. 1. Secretion vacuole showing pleomorphism of contents. Smaller vacuoles (V) at the periphery are apparently coalescing with the main vacuole, thus increasing its size. The myelin figures probably indicate phospholipid. The nature of the amorphous osmiophilic granular material is not known and it is emphasized that fixation has extracted many substances and possibly altered the appearance of others. Note narrow remaining rim of endoplasmic reticulum (ER). MV, microvilli (× 4,400 approx.).

Fig. 2. Part of an R-cell, showing irregularly shaped vacuoles and calcium deposits, some of them inside vacuoles. Fixation and embedding artefacts probably account for the irregular shape of the vacuoles. Ca, calcium; M, mitochondrion; N, nucleus; V, vacuole (× 16,000 approx.).

Plate VIII

Fig. 1. Calcium spherule, showing its typical structure with concentric lamellae between dense central and peripheral layers. Ca, calcium; L, lipid (× 30,000 approx.).

Fig. 2. Glycogen near lumen of cell. ER, endoplasmic reticulum; G, glycogen; Lu, lumen; MV, microvilli ($\times$ 12,000 approx.).

Plate IX

Fig. 1. A myoepithelial cell (ME) showing the bundle of contractile fibrils (MF) in the deeper part of the cytoplasm; the more superficial area contains vacuoles (V). Underneath the myoepithelial cell is the thick basement membrane (BM) composed of an outer fibrillar and inner compact layer. On the other side of this are the tubular epithelial cells, mostly R-cells (R) in this photograph ($\times$ 5,500 approx.).

Fig. 2. Part of myoepithelial cell shown in Fig. 1, at higher magnification to show detail of contractile fibrils (MF). N, nucleus; V, vacuole ($\times$ 25,000 approx.).

Plate X

Fig. 1. Part of a myoepithelial cell (ME) with double-layered basement membrane (BM) separating it from the tubular epithelial cells. This shows the way in which the sinusoid (S) is lined partly by myoepithelial cells and partly by naked basement membrane. At the top of the photograph are parts of two granule-containing cells ($\times$ 6,600 approx.).

Fig. 2. The plasma membrane of the cells in the sinusoids is covered by a thin layer of amorphous osmiophilic material which is also present in an invagination (P). Note the granules (G) and vacuoles (V), some containing myelin figures. The nature of these cells is uncertain. N, nucleus. ($\times$ 6,600 approx.).

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