

Fig.1 An electron micrograph of the acinar cells of rat pancreas in control group showing normal apical-basal polarity of the exocrine acinar cells. The pyramidal cell has basal euchromatic nucleus (N) with prominent nucleolus (nu) and apical secretory cytoplasmic zymogen granules of high electron density and variable sizes (thick arrows). Note the parallel strands of rough endoplasmic reticulum in its basal part (arrow head) and mitochondria (M). X 4800

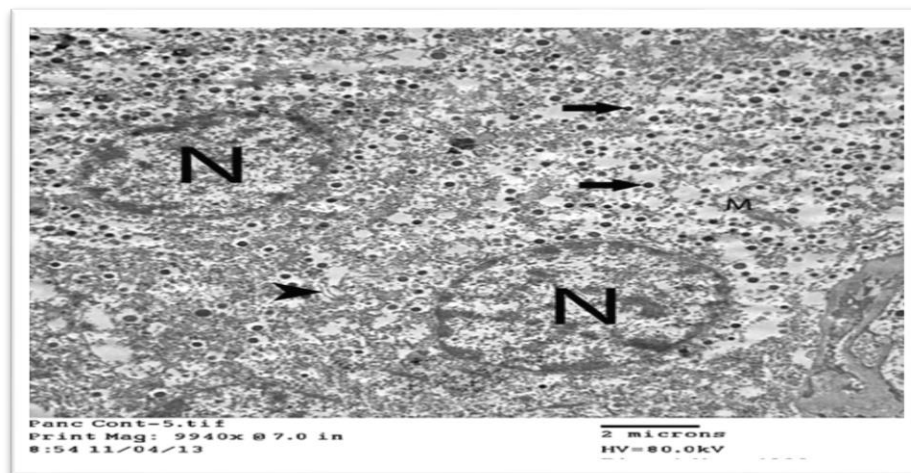


Fig.2 An electron micrograph of islet B cells in rat pancreas of control group showing adjacent beta cells with normal rounded nuclei (N) with abundant cytoplasmic granules (thick arrows), strands of rough endoplasmic reticulum (arrow head) and scattered mitochondria (M). X4800

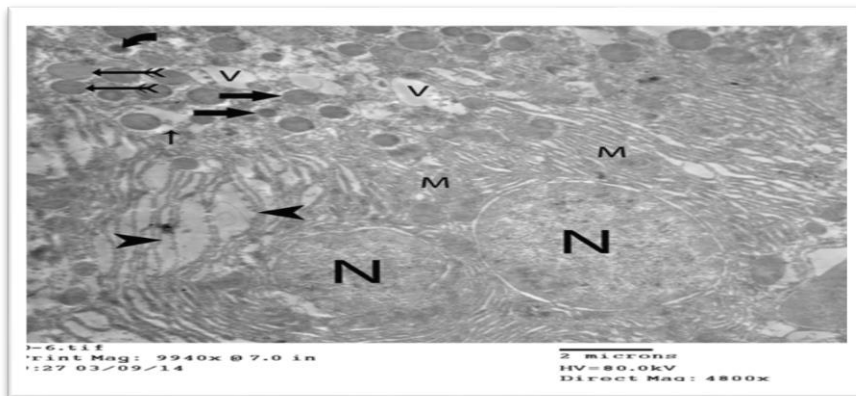


Fig. 3 An electron micrograph of the acinar cells in rat pancreas of group II showing preserved apical-basal polarity , basal euchromatic nuclei (N) , pleomorphic mitochondria(M), dilated cisternae of rough endoplasmic reticulum (arrow heads) and accumulation of apical spherical zymogen granules of variable sizes (thick arrows) and electron density (double tailed arrows).Occasional fusion between zymogen granules is noticed (thin arrow).Autophagic vacuoles (curved arrow) and cytoplasmic vacuulations (V) can be noticed. x4800

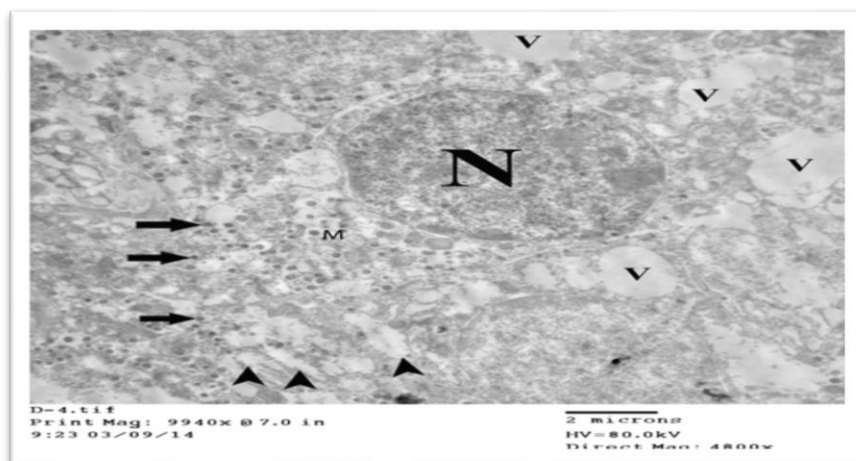


Fig. 4 An electron micrograph of Islet B cells in rat pancreas of group II showing hyperchromatic nuclei (N), marked vacuulations (V) and apparent reduction in the amount of secretory granules (thick arrows). Note dilated strands of rough endoplasmic reticulum (arrow head) and mitochondria with disrupted cristae (M).,X4800

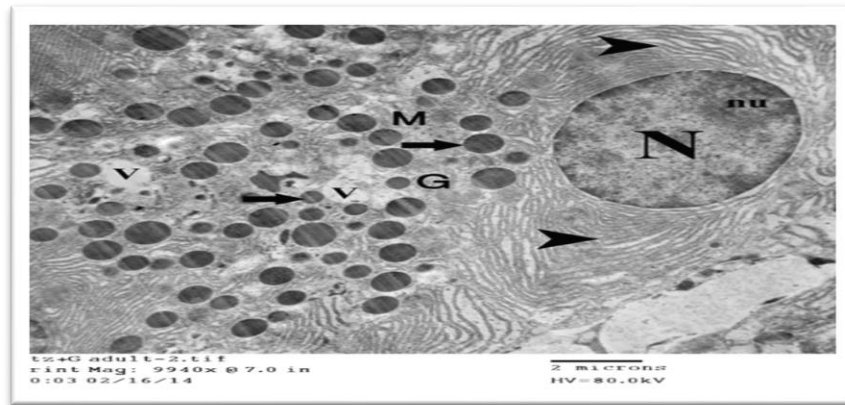


Fig.5 An electron micrograph of the acinar cells in rat pancreas of group III showing more or less basal rounded nucleus(N) ,abundant apical cytoplasmic secretory granules with high electron density and variable sizes (thick arrows), parallel strands of rough endoplasmic reticulum(arrow heads),suranuclearGolgi complex (G) and scattered mitochondria (M). Minimal cytoplasmic vacuoles are noticed (V). X 4800

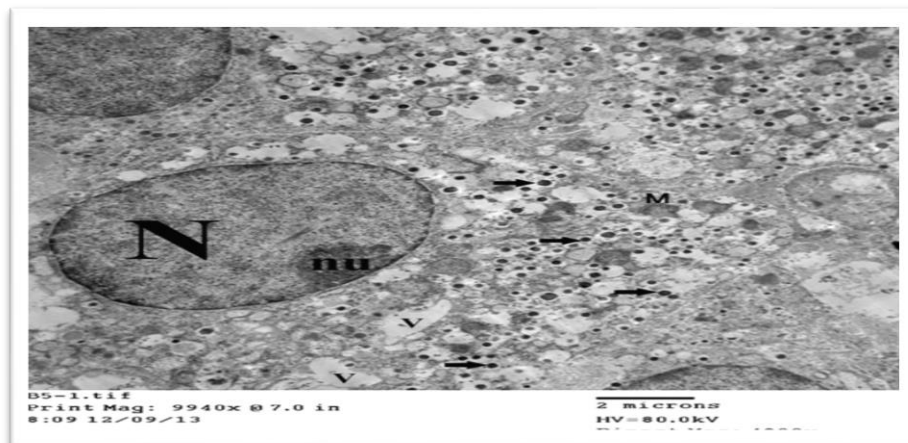


Fig.6 An electron micrograph of Islet B cells in rat pancreas of subgroup Ic showing more or less heterochromatic rounded nucleus (N) with prominent nucleolus (nu). The cytoplasm reveals minimal vacuolations (V), scattered mitochondria (M) and noticeable increase in secretory granules (thick arrows). , X 4800