

Teaching topics : Diseases of the Pancreas

Teaching outline :

I. The Exocrine Pancreas

A. Congenital Abnormalities

1. Ectopic pancreas
2. Annular pancreas
3. Cystic fibrosis

B. Inflammatory Disorders

1. Acute pancreatitis
2. Chronic pancreatitis

C. Neoplastic Disorders

1. Mucinous cystic neoplasms
2. Serous cystic neoplasms
3. Solid, cystic and papillary epithelial neoplasms
4. Acinar cell carcinoma
5. Ductal adenocarcinoma
6. Anaplastic carcinoma
7. Metastatic cancers

II. The Endocrine Pancreas

A. Islets of Langerhans

Four major cell types

β -cells 70% - Insulin

α -cells 20% - Glucagon

δ -cells 5-10% - Somatostatin

PP (Pancreatic polypeptide) cells 1-2%

Two minor cell types

D1 cells - vasoactive intestinal peptide

Enterochromaffin cells - serotonin

B. Diabetes mellitus

C. Islet cell Tumors

D. Multiple endocrine neoplasia (MEN) Syndromes