

Pancreatic Tumors

	Non-Endocrine neoplasms	Insulinoma	Gastrinoma (Zollinger Ellison Syndrome) > MC tumor associated with MEN
C.P	<ul style="list-style-type: none"> Weight loss ☐ Pain ☐ Jaundice (fluctuating) ☐ Steatorrhea ☐ Diabetes Mellitus ☐ Acute Pancreatitis ☐ Malignant Ascites ☐ Gastric Outlet Obstruction 	<p>Whipple described a triad</p> <ul style="list-style-type: none"> 1. Fasting produces fainting. 2. During these "attacks" there is hypoglycaemia. 3. The attacks may be relieved by ingestion of glucose. 	<ul style="list-style-type: none"> 1-peptic ulcer disease 90%. pain more over in severe and less response to medical treatment. 2-Co-existing diarrhoea. 3- (ZE-Syndrome) <ul style="list-style-type: none"> hypersecretion of gastric acid severe peptic ulceration presence of non-beta cell tumour of the pancreas or duodenum) 4- associated with (MEN 1) <ul style="list-style-type: none"> Parathyroid Hyperplasia Pituitary Adenoma Gastrinoma
Investigations	<ul style="list-style-type: none"> 1-US 2-Angiography (Coeliac, Superior – Mesenteric) 3-Laparoscopy 4-ERCP 5-Histology & cytology 6-CT 7-MRI 	<ul style="list-style-type: none"> 1. Measurement of blood sugar in an attack. <ul style="list-style-type: none"> Insulin level are estimated by radio-immunoassay. 2. Overnight fasting serum glucose and insulin level (before & after overnight) <ul style="list-style-type: none"> Combination CT Scan and selective angiography 3.Pre-operative localization of the tumour very important identification at operation can be difficult 	
Mx	<ul style="list-style-type: none"> A. Surgical Treatment <ul style="list-style-type: none"> A. Whipple operation (Pancreaticoduodenectomy) B. Pylorus Preserving Pancreaticoduodenectomy C. Total Pancreatectomy Palliative Surgical Treatment (Surgical Bypass) For tail of the pancreas (Distal pancreatectomy) Body of the pancreas (Distal + removal of the body of pancreas) B. Non Surgical Treatment <ul style="list-style-type: none"> Percutaneous coeliac ganglion blockade. (For pain) Stent to compress bile duct. Combination of chemotherapy and radiotherapy may become alterative in the future. 	<ul style="list-style-type: none"> 1.If the tumour localized surgical resection is the TR of choice also this apply to metastases. 2.If the tumours not localized during surgery (Intra operative USS can be done to localize the tumour) than resected. 3.Sub total distal resection for multiple tumours is appropriate. 4.With negative exploration it is appropriate to perform pancreatectomy distal to the superior mesenteric vessels. 5.The Hypoglycemic attacks may be relieved by diazoxide or streptazotocin. 	<ul style="list-style-type: none"> 1-Medical therapy : — Omprazole considered the Syndrome antisecretory drug 2- Surgical Treatment: <ul style="list-style-type: none"> Tumour excision. Total gastrectomy have parathyroid surgery performed prior to removal of gastrinoma.