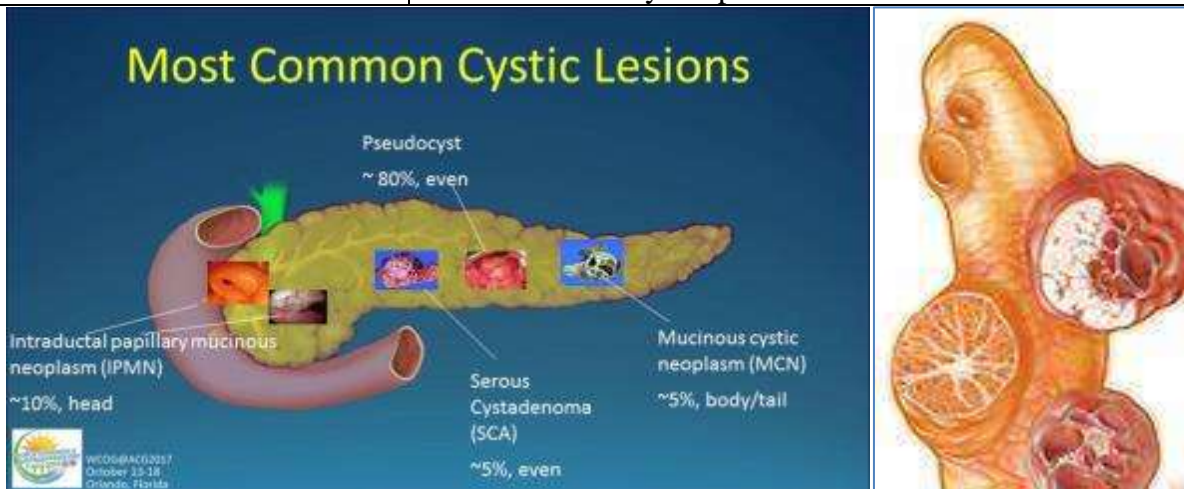


310 & 311
XVIII. Diseases of Liver, G. Bladder, Pancreas & Peritoneum
Pancreas

Cysts of pancreas	
The pancreas:	<ul style="list-style-type: none"> • Is diminished in size • Shows indistinct lobulations • Appears cystic
Cut surface:	<ul style="list-style-type: none"> • Nodular (in parts) • Cystic in other parts (dilated ducts) • Pale greyish-white (fibrosis) • Few little whitish foci (calcification)
Consistence:	<ul style="list-style-type: none"> • Firm in the fibrotic areas
Cystic ducts:	<ul style="list-style-type: none"> • Variable in size • Contain thick tenacious mucus • Surrounded by atrophied acinar tissue

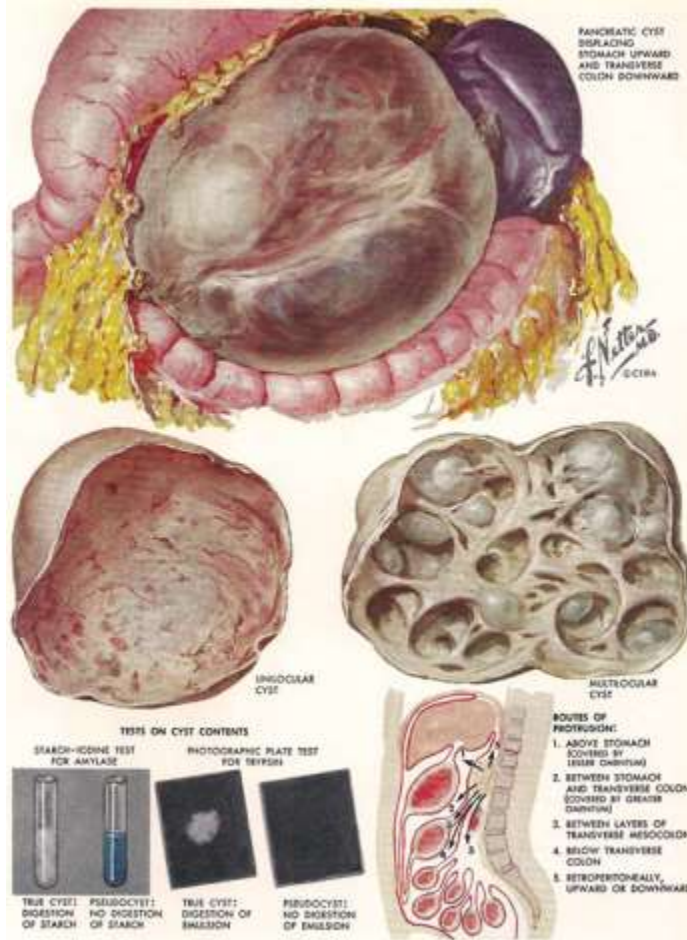


N.B.:

Fibrocystic disease of the pancreas (polycystic pancreas or congenital cystic fibromatosis) is a rare disease encountered in children and at young ages.

It may be associated with various lesions in the pancreas or/and other organs resulting in various clinical manifestations:

- 1. Atresia of cystic duct, pancreatic duct and of small intestine.***
- 2. Inspissation of the secretion in the pancreatic ducts and all mucus-secreting glands of the pas (mucoviscidosis).***
- 3. Congenital abnormalities + deficiency in vitamin-A (produced by faulty absorption because the pancreatic disorder) → metaplastic changes.***
- 4. Symptoms related to the pancreas, liver and gastro-intestinal tract (congenital steatorrhea or Coeliac disease i.e. foul greasy loose bulky stools, emaciation and delayed development, symptoms resembling those of cirrhosis of liver and symptoms related to other glands in the body.***
- 5. Pulmonary symptoms (emphysema, bronchiectasis, lung abscess, atelectasis and even the condition may end fatally by pulmonary infection or pneumonia.***



Pseudo-Cyst

The pancreas

- Is about normal in size
- Shows a cystic swelling near its tail

The cystic swelling:

- Lies in the vicinity of pancreas but, not within its substance
- Is solitary
- Moderately-large in size
- Rounded in shape
- Has a thick fibrous wall

Contents:

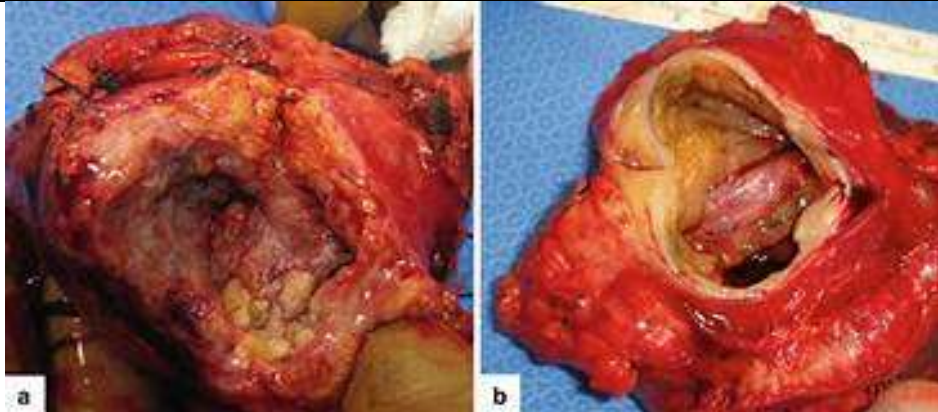
- Necrotic dark red material
- Haemorrhagic, turbid, thick and fluid

N.B.1:

- *This is a pseudocyst of the pancreas, the common site of which is at the lesser sac between the stomach and colon. Pancreatic cysts may be :*
 - 1. Pseudocysts:** *The commonest; moderately-large; no epithelial lining; no connection to duct-system.*

Causes:

 - a. *An injury to pancreas (trauma) and/or a previous attack of acute necrosis.*
 - b. *A subvariety:*
 - c. *The degenerative cyst (in superficial portion of pancreas).*
 - 2. Congenital cysts:**
 - d. *Rare; may be part of the general cystic disease (lungs and kidneys).*
 - e. *If + angioma of retina and brain → Lindau's disease.*
 - f. *The cysts are small or moderate in size, have a thin capsule and clear or turbid contents.*
 - 3. Cystic fibrosis:**
 - *The acinar tissue is replaced by cysts which are surrounded by fibrous tissue.*
 - 4. Neoplastic cysts:**
 1. *Cystadenoma (multilocular).*
 2. *Cystadenocarcinoma.*
 - 5. Retention cysts:**
 - *Small, associated with chronic pancreatitis, and may be due to partial or intermittent obstruction.*
 - 6. Parasitic cysts:** *Such as Ecchinococcus cyst.*



N.B. 2

Other lesions in the pancreas

I. Congenital abnormalities:

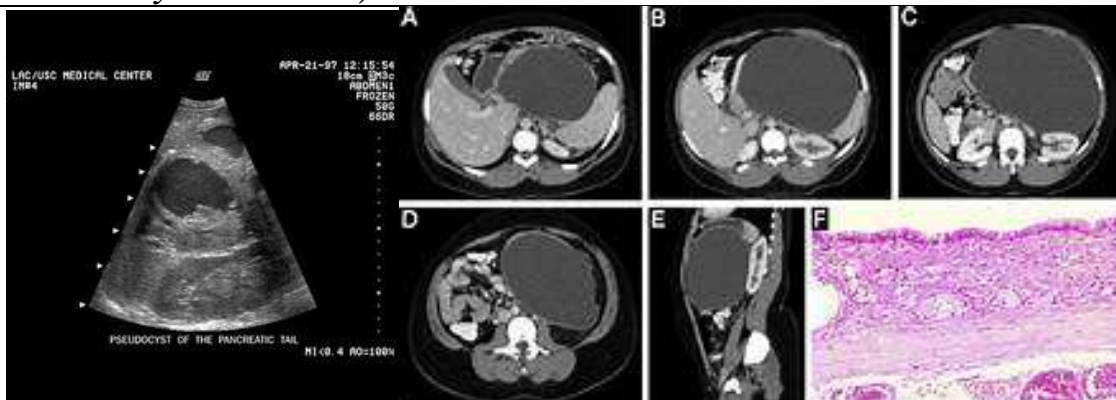
1. *Absence (agenesis).*
2. *Separate two structures.*
3. *Hypoplasia.*
4. *Aberrant pancreas (ectopic displaced tissue in stomach, small intestine, or other organs).*
5. *Anatomical variations in the duct-system.*

II. Calculosis

1. *Rare;*
2. *Small in size;*
3. *Stones consist of calcium and phosphate ;*
4. *Lie in the pancreatic duct;*
5. *May lead to bacterial infection or/and obstruction.*

III. Fat necrosis:

- *Secondary to acute necrotic haemorrhagic pancreatitis or is post-operative.*
- *Is due to the release of the pancreatic lipase → action on neutral fats → splitting of lipid cells (but the cell membrane may persist as hollowed outlines); the liberated fatty acids (with alkaline salts) → saponification → soaps → appear as chalky white precipitates which are dull opaque and small (at pancreas and its vicinity as well as mesentery and omentum).*



IV. Pancreatic atrophy:

- *Due to arteriosclerosis of pancreatic arteries → ischaemia; or, is due to obstruction of pancreatic ducts.*

V. Pigmentation: In haemochromatosis.

VI. Miscellaneous: Fatty change; hyalinization of the islets; Bilharziasis; rupture etc....