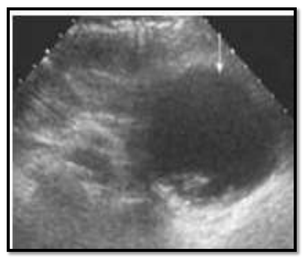
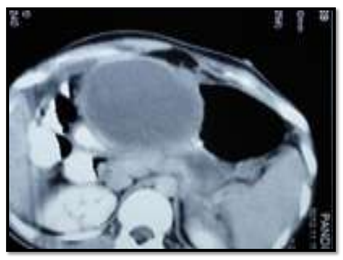
CYSTIC LESIONS OF PANCREAS: A PANORAMIC VIEW

AUTHOR:DR.S.SANJITHA

CO-AUTHORS:PROF.DR.K.VANITHA, DR.N.KAILASANATHAN, DR.MALATHI.R, DR.SUNDARESWARAN, DR. KALPANA.S, DR.BABU PETER.S, DR.RAMESH.D,DR.AMARNATH.C, DR.DEVIMEENAL.J, DR.MANIMEKALA

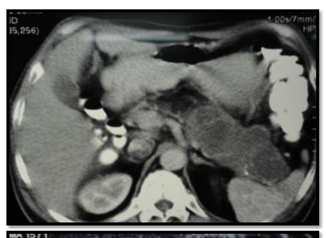
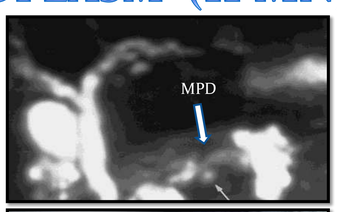
BARNARD INSTITUTE OF RADIOLOGY, MADRAS MEDICAL COLLEGE

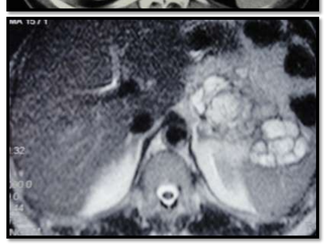
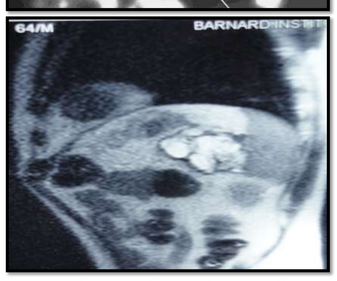
PSEUDOCYST

H/O acute pancreatitis; elevated sr.amylase
90% of all cystic pancreatic lesions
Unilocular cystic lesion showing wall enhancement in CECT
Hypointense on T1 ; hyperintense on T2
Cysts >5 cm should be drained

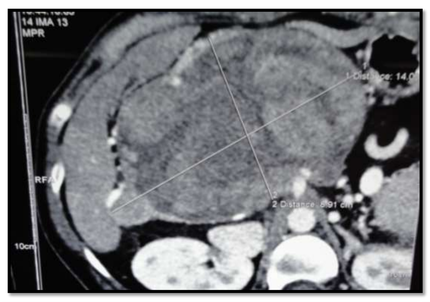
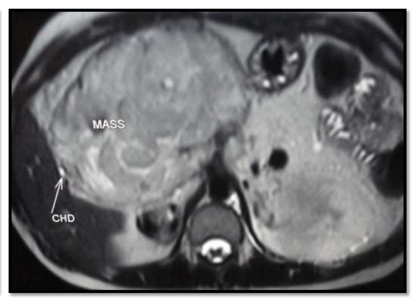
INTRADUCTAL PAPILLARY MUCINOUS NEOPLASM (IPMN)

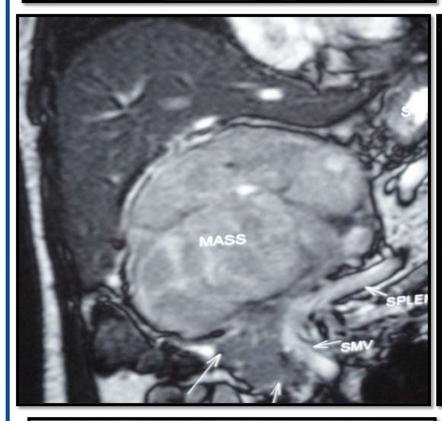



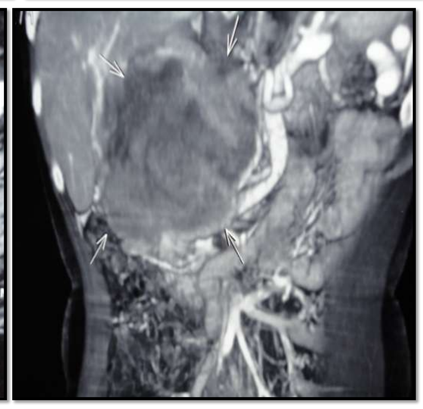



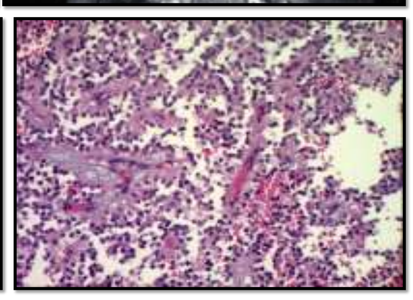
Mucin producing tumor developing from epithelium of MPD or its side branches
Anatomical classification –main duct,side branch or mixed IPMN
Main duct IPMN occurs in the head.
diffuse dilatation of the MPD due to mucin
Mural nodules,thick septa,wall calcification,MPD dil>1cm are malignant markers

SOLID PSEUDOPAPILLARY TUMOR

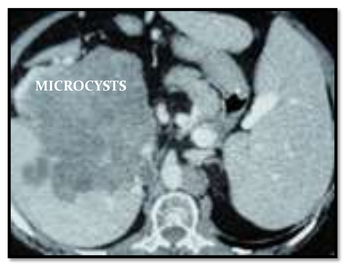


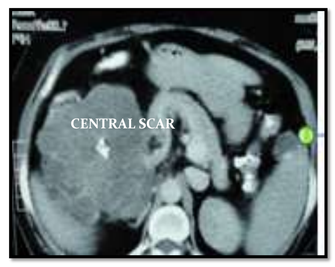


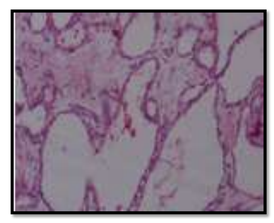
Rare benign exocrine tumor; rarely malignant
Female : male ratio 9:1. ; occurs commonly in the 2nd, 3rd decade
Well defined capsule , intratumoral haemorrhagic areas are characteristic.
Solid areas in the periphery; cystic areas noted in the centre of the mass
Hemorrhagic areas appear hyper in T1
Tumor periphery does not demonstrate hypervascularity like insulinomas
Surgical excision is the treatment of choice with very good prognosis

SEROUS CYSTADENOMA

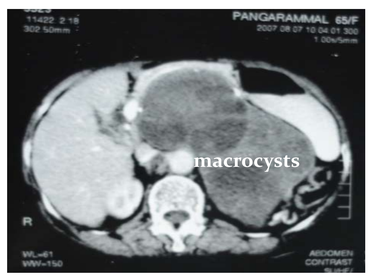


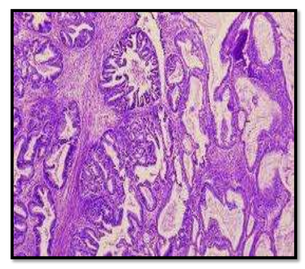


Benign tumor of females in 6th decade
Microcystic honeycomb pattern due to multiple small cysts
Cysts>6 in no ; size <2cm
Fibrous central scar with a stellate calcification is characteristic
Fine external lobulations , septa and cyst wall enhancement are seen



MUCINOUS CYSTIC NEOPLASM





Female predominance, 4th decade
Cysts no< 6; size> 2cm
Mostly malignant
Majority >5cm with smooth contour
Solitary,multilocular with large compartments
Peripheral eggshell and septal calcifications specific
Benign ,borderline or malignant based on HPE
No communication with MPD; No ductal involvement

CLASSIFICATION OF PANCREATIC CYSTS

Pseudocyst

Common tumors

Mucinous cystic neoplasm
Serous cystadenoma
IPMN

Rare tumors

Solid pseudopapillary tumor
Acinar cell cystadenocarcinoma
Lymphangioma
Hemangioma
Paraganglioma

Solid lesions with cystic degeneration

Cystic islet cell tumors
Pancreatic adenocarcinoma
Cystic teratoma
Sarcoma

True epithelial cysts

CONCLUSION:

Majority of the cystic lesions are benign, being discovered incidentally
MDCT is the modality of choice with MRI and MRCP being employed to demonstrate the cyst relationship with the duct
Prognosis for cystic lesions is good, even malignant cysts fare better than adenocarcinoma

REFERENCES:

www.annals.edu.sg/pdf/38VolN03Mar2009/V38N3p251.pdf
www.ajronline.org/cgi/content/full/179/6/1375
Lee and Sag textbook of gastroenterology