ORIGINAL RESEARCH PAPER

General Surgery

MUCINOUS CYSTADENOMA OF PANCREAS - A INCIDENTAL FINDING WITH CLINICAL SIGNIFICANCE

KEY WORDS: Cystic neoplasm of pancreas , mucinous neoplasm , surgery , surveillance.

Dr. P. Pavithran Surgery Resident, Institute of General Surgery, Madras Medical College , Chennai – 600003.

Dr. M. Sivan M.S, Senior Assistant Professor, Institute of General Surgery, Madras Medical College, Chennai – 600003.

Dr. P. Thangamani M.S, Professor, Institute of General Surgery, Madras Medical College, Chennai - 600003

Dr. R. Kannan* M.S, Head of Department and Professor , Institute of General Surgery , Madras Medical College, Chennai - 600003. *Corresponding Author

ABSTRACT

Cystic neoplasm of pancreas , a unique entity is gaining its importance due to increased incidence of it's diagnosis .The increased frequency of the diagnosis can be attributed to the heightened usage of the cross sectional imaging such as Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) .However elucidating the malignant potential of those cysts in a pre operative imaging still remains a challenge and thus a line of demarcation between surveillance and surgery is still undetermined. The differentiation between a serous and mucinous cyst is possible to a certain extent with cross sectional imaging. Mucinous cystic neoplasm carries a high malignant potential compared to the serous neoplasms and hence augmented tissue sampling is required to ascertain malignant potential. Herein presenting a 43 year old female who presented with vague abdominal pain and incidental finding of cystic lesion of the pancreas in Ultrasonography diagnosed with mucinous cystic neoplasm of pancreas in further followup.

INTRODUCTION

Cystic neoplasm of pancreas are the second most common exocrine neoplasm of pancreas behind adenocarcinoma of pancreas. Mucinous variety of cystic neoplasm being the common entity encountered among them. Mostly seen among the perimenopausal females around 40 to 50 years of age; female : male ratio being 20:1. Most affected site is the body and tail of the pancreas. Average size at presentation 1.5 to 35 cm.

Case Report

A 43 year old female presented with chief complaints of vague abdominal pain for about a month

Abdominal pain

- Epigastric region
- Insidious onset
- Dull aching, Continuous
- Radiating to the back
- Associated with vomiting
- No periodic variation
- No aggravating factors
- Relieved spontanoeusly
- Mild to moderately severe

Vomiting for the past 3 days

- Minimal quantity
- Contains undigested food particles
- Blood streaks present over the contents
- Non bilious

No h/o fever, abdominal distension, altered bowel habits, mass and pain over other regions

No h/o burning micturition, pain during micturition, dribbling of urine and dark colored urine

No h/o complaints pertaining to other symptoms

H/o loss of appetite present

No h/o loss of weight

No h/o loss of weight

Past History

K/c/o of Bronchial asthma for 10 years on medication

K/c/o of Type 2 Diabetes mellitus for 10 years on medication

No other h/o previous hospitalisation or surgeries

On Examination

Patient is conscious, oriented

Hydration - fair ; afebrile

No pallor, icterus, cyanosis, clubbing, lymphadenopathy and pedal edema

General Examination

CVS – S1 and S2 heard
No added sounds

RS – NVBS heard
Bilateral air entry equal

CNS – No neurological deficit noted

P/A – soft ; non tender
No organomegaly ; no mass felt
Bowel sounds – heard

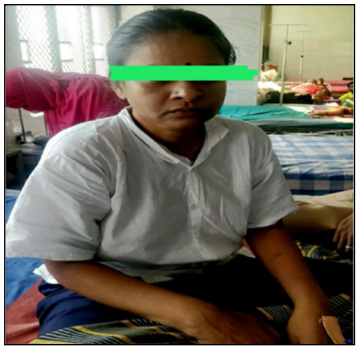

Fig 1 Preoperative image of the patient

Patient was initially evaluated elsewhere and preliminary imaging was done with report as follows

USG Abdomen And Pelvis :

Septated cystic lesion of size 5.3 × 4.4 × 4.7 cm noted in the left

suprarenal region with internal echoes

Impression:
Septated cyst of the pancreatic tail / left adrenal region

CT Abdomen And Pelvis (Plain) :
Well defined multi sepatated cystic lesion in superior recess of lesser sac of size 34 × 25 × 27 mm in relation to the tail of the pancreas extending into the splenic hilum probably retroperitoneal lymphangioma more likely

DD:
Cystic mesothelioma

Patient was planned for CECT Abdomen IV contrast

CECT Abdomen And Pelvis (IV contrast) :
Well defined cystic lesion with multiple septations and minimal solid components measuring 3×4 cm noted arising from the tail of pancreas lifting the splendid artery anteriorly. No evidence of invasion of adjacent organs; pancreatic duct dilatation and calcification within the lesion

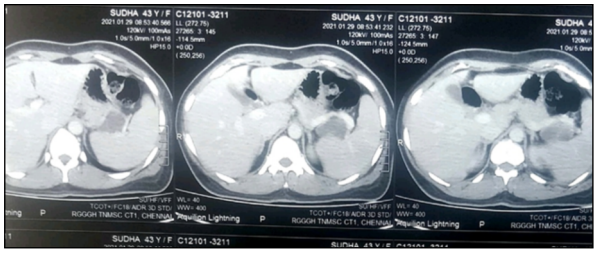

Fig 2 CECT Abdomen Showing Cystic Lesion Arising From Tail Of Pancreas Pushing Splenic Artery Anteriorly

Impression:
Multiloculated cystic lesion of pancreas possibility of mucinous cystadenoma of pancreas

Tumour marker :
- CA 19 9 – 11.59 U/ ml
- CEA - < 0.5 ng/ ml
- Within normal limits

Multidisciplinary Tumor Board Opinion :
Advice: Surgery

Procedure Done:
Distal pancreatectomy with splenectomy

Intraop Findings:

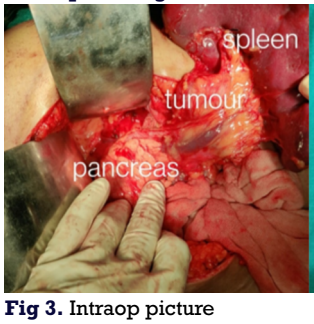

Fig 3. Intraop picture showing tumor

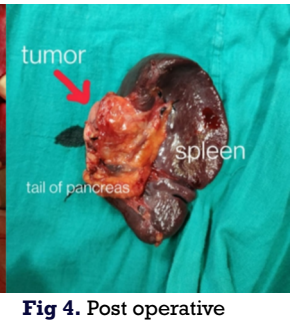

Fig 4. Post operative specimen

Post op HPE :
Features consistent with mucinous cystadenoma

DISCUSSION :
Cystic neoplasm of pancreas being a rare entity needs a high index of suspicion to be diagnosed. They usually present with vague symptoms like pain, vomiting or asymptomatic detected incidentally. However the discernation between serous and mucinous neoplasm of pancreas made quite possible with the advent of features in cross sectional imaging. Findings such as multiloculation, septation, and mural nodules lie more in favour of mucinous neoplasm. Also this differentiation carries importance because of the fact that mucinous carries high malignant potential. And surgery remains primary modality of treatment. Observation can be carried out in selected cases such as cyst less than 3cm, absence of mural nodules and papillae. Presence of ovarian like stroma in epithelium is diagnostic of Mucinous neoplasm. Also cyst has higher levels of mucin and CEA. Determination of invasive component in post operative specimen is mandatory for further follow up and adjuvant therapy.

CONCLUSION:
Cystic neoplasm of pancreas is a rare entity Treatment protocol and follow up adjuvant therapy remains still a ground for research However diagnosing and resecting these tumors carry paramount importance because of their malignant nature.