

## Case Report

DOI: <https://dx.doi.org/10.18203/2349-2902.ijssurgery20214771>

# Mucinous cystic neoplasm of pancreas a case report

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**Received:** 23 October 2021

**Accepted:** 17 November 2021

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### ABSTRACT

Mucinous cystic neoplasm of pancreas are relatively rare >95% occur in the body and tail of pancreas. Majority occur in young and middle aged female containing ovarian type subepithelial stroma. These tumors are either premalignant (MCN with low grade dysplasia) or (MCN with high grade dysplasia) or invasive carcinoma. Differential diagnosis includes pancreatic pseudocyst and pancreatic hydatid cyst. Investigations include ultrasonography (USG), Magnetic resonance imaging (MRI), Contrast enhanced computed tomography (CECT) supplemented by endoscopic USG with cyst fluid aspiration.

**Keywords:** Mucinous cystic neoplasms, Pancreas

### INTRODUCTION

Mucinous cystic neoplasm of pancreas are uncommon primary tumors that typically effect middle aged women.<sup>1</sup> They have pathologic and clinical similarity to Mucinous cystic neoplastic tumors of ovary and biliary cystadenoma of liver. They can be considered less aggressive carcinoma with favourable prognosis. All mucinous cystic neoplasms to be considered as mucinous cystadenoma of low grade malignant potential.<sup>2</sup> In most cases USG and CT are mainstay for radiological evaluation. Surgical resection with negative margin is curative for all non invasive mucinous cystic neoplasms. This is a case report of a patient 31 year old female with a huge mucinous cystic neoplasm of pancreas.

### CASE REPORT

This is a case report of a 31 year old female patient came with complaints of lower abdominal distension and abdominal discomfort since 1 month. On examination her vitals were stable.

Per abdomen examination-abdomen was soft, a vague mass palpable over the umbilical region extending to left

and right lumbar and suprapubic region, borders well defined, independent mobility, firm consistency, dull on percussion.

Clinical diagnosis: mass per abdomen for evaluation (hydatid cyst, ovarian cyst).

Blood investigations were within normal limits except for neutrophilic leucocytosis.

USG abdomen revealed large complex cyst with multiple internal daughter cysts in the central abdomen from pelvis to epigastric region measuring 16×14×16 cm with volume of 1894 cc.

To further characterise the cyst, a cect abdomen a well defined, well circumscribed intraperitoneal cystic lesion in the central abdomen, extending from pelvis to the epigastric region. No invasion into the adjacent bowel/solid abdominal organs suggestive of intra peritoneal hydatid cyst in the central abdomen.

#### *Surgery*

Under GA, patient was taken for exploratory laparotomy. A mass measuring 25×30 cm, cystic in consistency freely

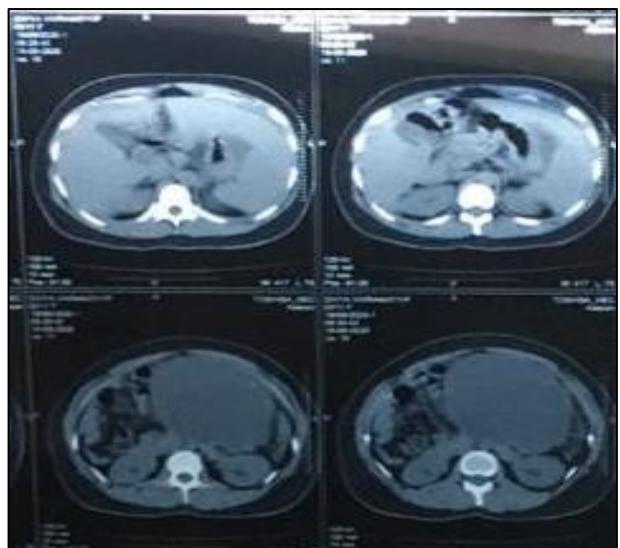
mobile in the peritoneal cavity except attached to the tail of pancreas with pad of tissue noted. Cystic mass dissected all around and was detached from pad of tissues from tail of pancreas. Mass was excised. Cystic mass with mucoid material sent for histopathology. All other abdominal organs found to be normal. Post-operative period was uneventful.

### ***Histopathology***

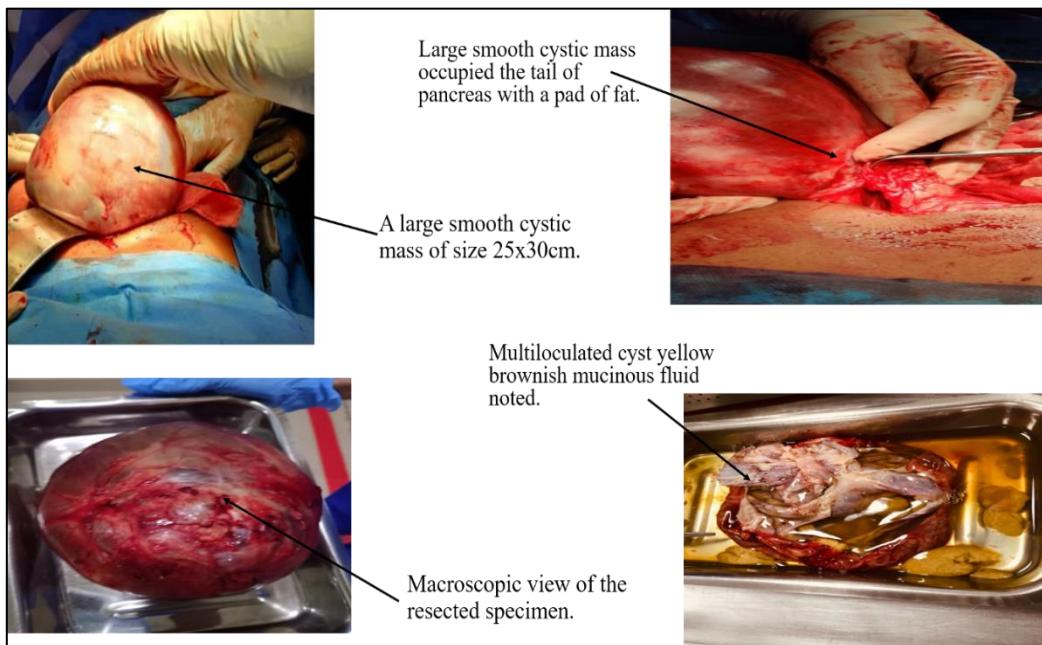
Microscopy-reveals a multiloculated cyst. The lining is tall columnar mucinous type. The cyst wall is dense fibrocollagenous. At places it resembles the swirled ovarian type stroma. Single pancreatic lobule including islet cells is seen. There is no evidence of invasive carcinoma.

### ***Impression***

Mucinous cystic neoplasm with focal low grade dysplasia of pancreas.



**Figure 1: CT abdomen showing well defined well circumscribed intraperitoneal cystic lesion.**



**Figure 2: Intro operative finding after excision of tumor.**

### ***DISCUSSION***

Cystic neoplasm of pancreas are rare and comprise 10 to 15% of pancreatic cystic masses and only 1% of pancreatic cancers.<sup>3</sup> They are slow growing indolent tumors with low grade malignant potential commonly seen in young women. Lack of history of trauma, chronic pancreatitis or a recent history suggestive of acute pancreatitis should raise a possibility of cystic neoplasm of pancreas.<sup>4</sup> Commonly asymptomatic, they sometimes reach large size prior to diagnosis. Routine use of abdominal USG, CT, MR has led to an increase in detection of pancreatic cystic lesions and reduce the

average size at diagnosis.<sup>5</sup> The accuracy of each of these diagnostic procedure is subject to error in technique of examination and interpretation as seen in our case it is an on table diagnosis. Biopsy of cyst wall with frozen section and histology is diagnostic. Recent European consensus guidelines have advocated a less aggressive management approach for the lesion in certain situation <4 cm and in absence of feature of cancer.<sup>6</sup> In indeterminate lesion or when radiological features are inconclusive or contradicting the management it is more challenging and surgical resection remains safest.<sup>7</sup> In our case surgical management where resection of tumor was

done. Regular follow up with oncosurgeon and general surgeon was advised.

## CONCLUSION

Cystic neoplasms are rare but should be considered in cystic lesions around the pancreas. An absence of history of trauma or history suggestive of inflammation of the pancreas may suggest a cystic tumor necessitating a detailed preoperative evaluation. Prognosis is favourable and should be operated immediately. Surgery remains the only treatment option that offers definitive cure for patients with Mucinous cystic neoplasm of pancreas, surgical excision is indicated for all Mucinous cystic neoplasm as the malignancy cannot be ruled out preoperatively.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Neetha V, Joe A, Hanumanthaiah KS, Venkatesh S. Mucinous cystic neoplasm of pancreas a case report. *Int Surg J* 2021;8:3714-6.