

## Case Report

## Giant Pseudo Cyst of the Pancrease: A Case Report

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**Abstract:** Pancreatic cysts are usually asymptomatic over 70% of the time. They can be benign or malignant. Enhanced imaging modalities and increased usage of routine imaging have increased the identification of pancreatic cysts. If symptomatic, abdominal pain or back pain, unexplained weight loss, jaundice, steatorrhea or palpable mass are usually the presenting complaints. Pancreatic cysts are typically assessed by cross-sectional computed tomography (CT) and magnetic resonance imaging (MRI). In this article, we present a case of a 55-year-old female with a large pancreatic pseudocyst, initially measured 27 cm x 23 cm, who was subsequently admitted to our unit and managed successfully. Exploratory laparotomy and pancreatic cystogastrostomy. It is rare to come across a pseudocyst of such large dimensions. Despite its large size, the patient presented with vague abdominal pain as the only chief complaint. The unusual presentation of symptoms and the enormous size of the pseudocyst make this a unique case. Managing giant pancreatic pseudocysts can be complex, as seen in this scenario by the multiple approaches attempted to treat the Pancreatic cysts.

**Keywords:** Pancreatic cysts, computed tomography (CT), imaging modalities, cystogastrostomy

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## INTRODUCTION

Pseudocysts are encapsulated fluid collection, without the presence of solid debris that develop within a minimum period of 4 weeks from the initial injury [1, 2].

Pancreatic pseudocysts are rather common complication of pancreatitis. However, few cases of giant pancreatic pseudocysts, which measure 10 cm or more in widest diameter, have been reported in the literature [3–10]. A high index of suspicion is needed to improve diagnosis.

## CASE REPORT

A 55-year-old female presented to our surgical outpatient department with abdominal swelling for about 3 years duration with early satiety, nausea, chill and lower grade fever but no history of abdominal pain, however positive history of alcohol consumption. On examination, pale and Per abdominal examination asymmetrical abdomen distending, palpable mass which on left hypochondrium area which is mobile, soft, non-tender with regular margin, non-pulsatile and unable to go above the mass, dull on percussion note and bowel sound was not appreciated with DRE was

unremarkable. An ultrasound showed the presence of a sizeable Intraabdominal cyst with measurements of 18.8 cm x 17 cm x 14 cm, with hemoglobin 9.7g/dl, urea and creatinine was within the normal range.

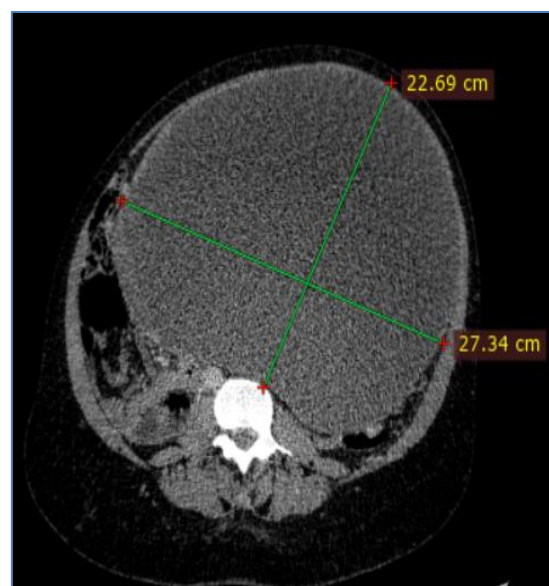
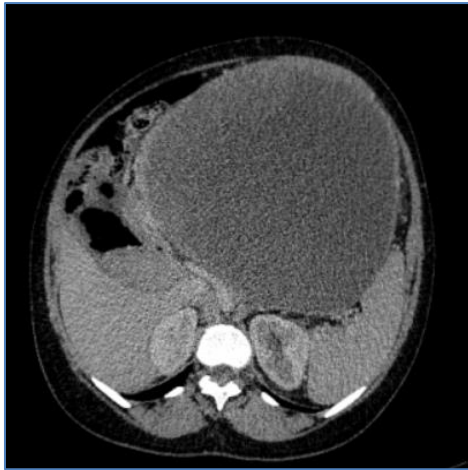


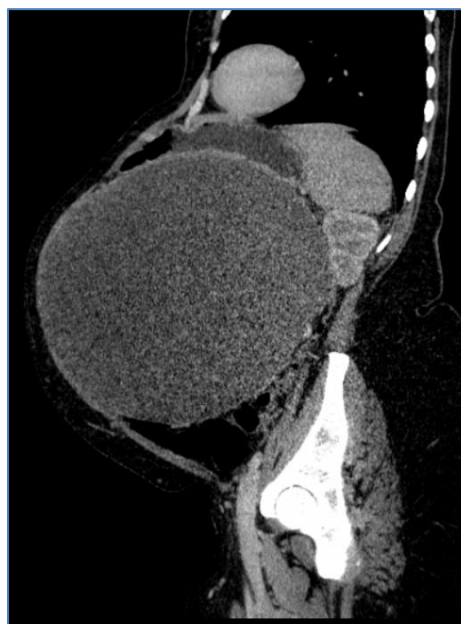
FIGURE A



**FIGURE B**



**FIGURE C**

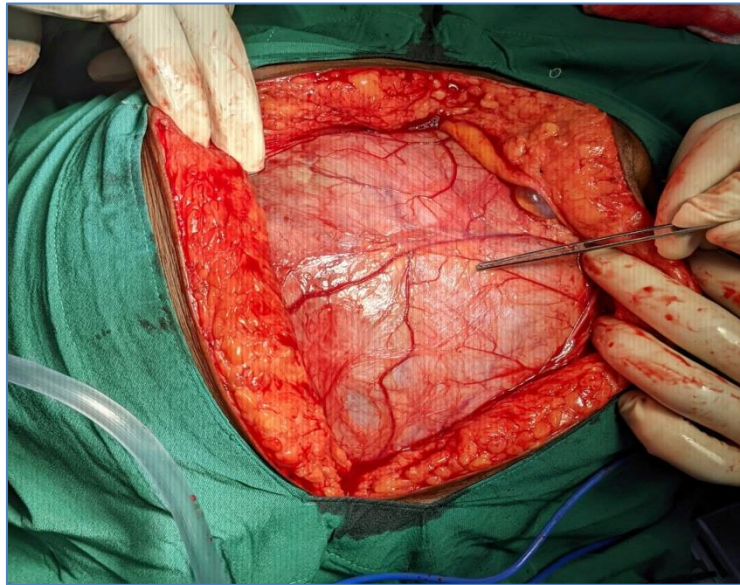


**FIGURE D**

Contrasted [IV] CT abdomen axial [a, b], coronal [c] and sagittal [d] images showing large well circumscribed cystic mass which is inseparably seen from the pancreatic body and tail measuring 27x23cm, it abuts the greater curvature of the stomach and as well exerting mass effect demonstrated by displacement of the adjacent blood vessels, stomach and bowel loops.

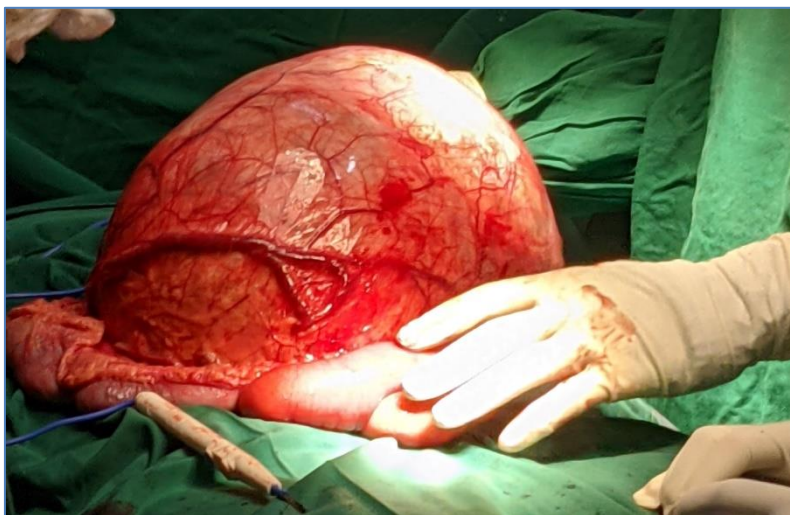
After having confirmed diagnosis surgery was planned with cystogastrostomy type of internal drainage

was planned to be done. Open laparotomy with a midline incision extending from the xiphoid process to the umbilicus. Initially, excision of the pseudocyst was attempted, but the pedicle could not be identified. Therefore, a cystogastrostomy was performed rather than excision of the pancreatic pseudocyst, creating an anastomosis between the posterior wall of the stomach and the anterior part of the pseudocyst.



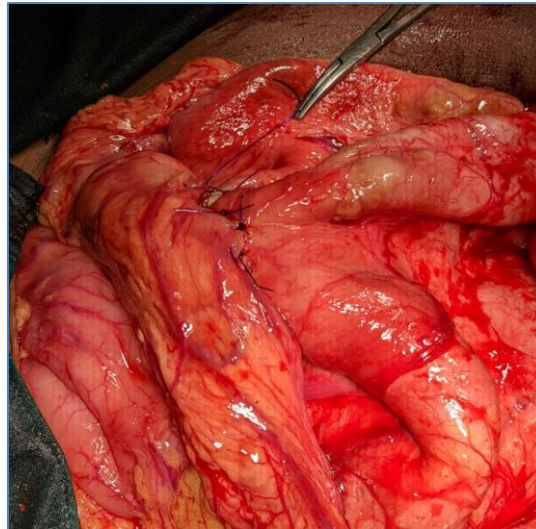
Two small incisions were made, one on the posterior wall of the stomach and another one on the anterior wall of the pseudocyst. Upon doing so, 7 L of fluid was drained from the pseudocyst. A sample of the

fluid was sent for culture and sensitivity, which turned out to be negative. Then side-to-side anastomosis was created between the posterior wall of the stomach and the anterior wall of the pseudocyst.



The anastomosis was noted to be widely patent and with good color and tension-free. The abdomen was irrigated with normal saline and aspirated, with no

evidence of bleeding or injury to the intra-abdominal organs.



## DISCUSSION

Pancreatic secretions accumulate in the retroperitoneum or peri-pancreatic tissues especially when the major pancreatic duct or one of the ductal branches becomes disrupted. The bulk of these accumulations undergo spontaneous resolution. However, in some cases, the fluid accumulation persists, and inflammatory process in tissue forms a fibrous wall around the fluid. This wall lacks normal epithelialization in its lining, hence is called a pseudocyst. The wall instead is lined by granulation tissue.

The incidence of pancreatic pseudocysts reported in literature is low at 0.5–1/100 000 adults per year [11]. The incidence increases considerably among patients with pancreatitis or history of trauma as noted in all our cases.

In patients with acute pancreatitis, it is estimated that the incidence of pancreatic pseudocysts varies from 5% to 16%, while in cases of chronic pancreatitis; it is higher, between 20% and 40% [12].

A very high incidence of pancreatic pseudocysts has been reported in patients with chronic pancreatitis from alcohol abuse. In a retrospective study of 97 patients, alcohol consumption was the most significant etiological factor in 64% of patients with chronic pancreatitis and 26% of patients with acute pancreatitis [13]. Alcohol was the identifiable etiological factor in our cases

Clinically, pancreatic pseudocysts presents in varying ways. Some could be completely asymptomatic while others may present with features of pancreatic and common bile duct obstruction. The most common clinical manifestations are abdominal swelling, pain, nausea and vomiting. Others include early satiety and weight loss. This was also reported in our case except feature of obstructed jaundice. Obstructive jaundice

may also occur, but depend on the location of the pancreatic pseudocyst is a good guide to both presentation and management [14, 15]

Surgical drainage is achieved via one of the following three options: cystoduodenostomy, cystojejunostomy or cystogastrostomy. The main consideration driving the surgical approach is the location and nature of the pseudocyst and the surgeon's preference [17].

Cystoduodenostomy is chosen when the pseudocyst is located in the head of the pancreas and adheres to the duodenum. This procedure is not feasible if a thick rim of pancreatic parenchyma is between the pseudocyst and duodenal wall [16, 17]. This procedure has also been considered the most technically demanding of the three options, with higher morbidity and mortality rates [18]. Cysto-gastrostomy is chosen when the pseudocyst is located in the epigastric region and adheres to the stomach. This was the case in our case. Cysto-gastrostomy is beneficial since it allows for postoperative drainage using a nasogastric tube;

Cystojejunostomy is the option of choice when the pseudocyst is very large and extends beyond the epigastric region to the umbilical, hypochondriac and lumbar region [18]. This procedure allows for dependent drainage, and is the anastomosis of choice for giant pseudocysts [19, 20]. We however found cysto-gastrostomy better in our giant pseudocyst cases especially for easy anastomosis.

## CONCLUSION

Giant pseudocysts of pancreas are a rare case. They can be effectively managed by cystogastrostomy. Pre-operative diagnosis could be challenging even with modern diagnostic facilities. Cysto-gastrostomy is beneficial in giant cases.

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## AUTHOR'S CONTRIBUTIONS

FM and PK played equal role in the preparation of this case report. The other co-authors contributed in caring and managing the patients. All authors read and approved the final case report.

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## DECLARATIONS

### Ethical Approval and Consent to Participate

Ethical clearance was obtained from joint of CUHAS/BMC Research and Ethical Committee (CREC) approval number CREC/540/2022. Written informed consent to take part in the study was obtained from all study patients were offered standard of care following diagnosis.

**CONFLICT OF INTEREST:** All authors declare no conflict of interest.

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