

## Case Report

# A rare case of giant pseudocyst of pancreas extending up to anterior abdominal wall requiring Roux en Y cystojejunostomy

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## ABSTRACT

Pancreatic pseudocyst is rather a common complication following pancreatitis and chronic alcoholism related. Only few cases of giant pseudocyst measuring more than 10 cm of size or more in widest diameter has been reported in the literature. Possible attributable factors for less reported cases may be due to discrepancies in sizing classification, in several studies the term 'large' or 'huge' were used instead of 'giant' when cyst measuring 10 cm or larger in its widest diameter. Pancreatic pseudocyst is usually sterile but when get secondarily infected may lead to life threatening complications such as pancreatic abscess which becomes very difficult to treat. Hence proper and timely intervention of giant pancreatic pseudocyst would probably reduce the risk of developing such dangerous complications. In the treatment of pancreatic pseudocyst to prevent recurrence and especially in protection of endocrine function of pancreas internal drainage is found to be more beneficial when compared to other modalities. This case demonstrates the successful use of Roux en Y cystojejunostomy to surgically drain a giant pancreatic pseudocyst at an unusual location.

**Keywords:** Giant pseudocyst of pancreas, Roux en Y cystojejunostomy, Chronic pancreatitis

## INTRODUCTION

Pancreatic pseudo cyst is an encapsulated collection of fluid with a well-defined inflammatory wall that can be seen secondary to both acute pancreatitis and chronic pancreatitis.<sup>1</sup> The incidence of pseudo cyst occurs in 5% to 15% patients with peripancreatic fluid collections as a complication of acute pancreatitis after a time period of 4 weeks of duration whereas in chronic pancreatitis it is 20-40%.<sup>2</sup> The capsule is composed of collagen, granulation tissue and it is not lined by epithelium. Only 50% of patients with pancreatic pseudo cyst present with symptoms others remain asymptomatic.<sup>3</sup> Observation is indicated in asymptomatic patients as spontaneous regression is seen in 70-80 % of cases as seen in majority of patients with pancreatic pseudo cyst diameter of less than 4 cm.<sup>4</sup> In spite of majority of cases undergoing spontaneous resolution risk of subsequent complications

such as rupture or infection are higher in larger lesions (>10 cm) and hence the decision for intervention versus observation should be individualized to each patient.<sup>5</sup>

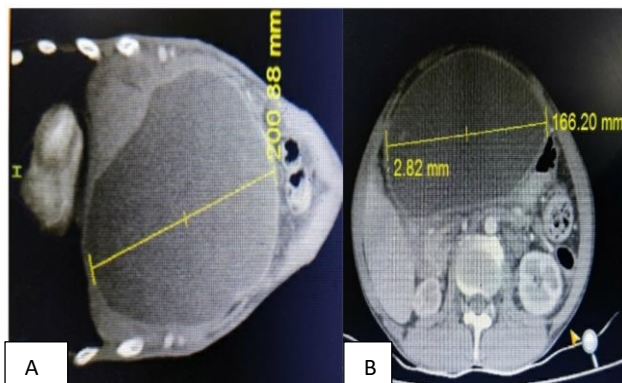
## CASE REPORT

A 55-years male a known case of chronic pancreatitis presented with diffuse abdominal swelling, history of weight loss, difficulty in swallowing, nausea, fatigue for a duration of 2 weeks, to surgery OPD. On examination palpable swelling occupying epigastric, umbilical, partially both hypochondrium and lumbar regions as shown in Figure 1. Serum amylase level was more than 2,000 U/l. Other parameters were within normal range. CECT abdomen showed a pseudocyst of pancreas of size 17x20 cm as shown in Figure 2, just below the anterior abdominal wall and pressing the stomach anteriorly. Intra operatively sac is densely adherent to the parietal

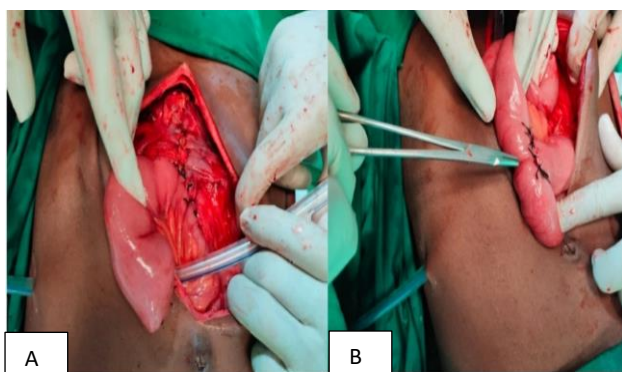
peritoneum in anterior abdominal wall. Around 3 liters of brownish green fluid are aspirated. Roux en Y cysto-jejunostomy done as shown in Figure 3, post-op period uneventful, patient was discharged on POD-9 and the condition of the patient at time of discharge was stable.



**Figure 1: Patient with diffuse abdominal lump occupying epigastric and umbilical regions.**



**Figure 2 (A and B): CECT abdominal picture of pseudocyst in coronal and axial view.**



**Figure 3 (A and B): Intra operative procedure done showing Roux loop joined with the cyst wall, 15 cm from DJ flexure loop end closed with two layer and Y loop joined from end to side anastomosis of 45 cm from the anastomosed Roux loop.**

## DISCUSSION

The incidence of pseudo cyst of pancreas in association with chronic pancreatitis is seen in up to 40% of cases. Invasive therapies are indicated only in patients who are symptomatic. Definitive treatment depends on the location of the cyst.<sup>6</sup>

The presenting symptoms in patients with pseudo cyst are highly variable. Abdominal radiological imaging with CT/MRI has become the standard for evaluating the patient with a known or suspected pseudo cyst. CT scan is considered as the modality of choice for surveillance for an identified early peripancreatic fluid collection to evaluate for resolution vs progression to a pseudo cyst.<sup>7</sup>

The most common and most preferred surgical management of pseudocyst was cysto-gastrostomy and cysto-duodenostomy.

Cysto-jejunostomy is the 2<sup>nd</sup> most commonly performed drainage procedure for pseudo cyst with similar efficacy and success rates as that of cysto-gastrostomy.

The incidence of recurrent pancreatitis and exocrine insufficiency was much lower in Roux en Y cysto-jejunostomy but nearly 20% of patient had endocrine insufficiency which required some antidiabetic medication.<sup>8</sup> Cysto-jejunostomy is typically indicated for pseudo cyst located outside the lesser sac. Its advantage over cysto-gastrostomy includes the ability to drain pseudo cyst in almost any location and drain multiple pseudo cyst.<sup>9</sup> It is typically performed using a proximal segment of jejunum that reaches easily the area pseudo cyst and then constructed as a Roux-en-Y with the cysto-jejunostomy to the Roux limb and then a jejunojejunostomy to restore continuity as shown in Figure 3A and B. Similarly, study conducted by Tustumi et al concluded that Roux en Y cysto-jejunostomy will provide good outcomes in both acute and chronic pancreatic pseudocyst.<sup>10</sup>

## CONCLUSION

Pseudocyst of pancreas at unusual locations similar to our case requiring Roux en Y cysto-jejunostomy will give better outcomes. Post-operative follows up after discharging the patient is essential to look for recurrence or anastomotic leak. As such it is a rare situation of pseudocyst presenting at an unusual location.

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