Chronic pancreatitis complicated by pseudocyst formation may lead to infection, hemorrhage, pancreatic ascites, fistula, and compression of the common bile duct. Jaundice is not uncommon in chronic pancreatitis and occurring in 15-20% of patients. However, only 14% to 26% of those patients are due to pancreatic pseudocyst compression. It is important to differentiate pancreatic pseudocyst compression from other causes of biliary obstruction such as in inflammatory stricture of intrapancreatic bile duct, com mon bile duct stone, and abscess. We report a case of chronic pancreatic pseudocyst compressing the main pancreatic duct.

**CASE REPORT**

A 29-year-old male was admitted with the chief complaint of epigastric pain, anorexia, and jaundice for 1 week. The patient had a history of alcoholic pancreatitis within the previous two years. On admission, physical examination revealed blood pressure 140/86 mmHg, pulse rate 82/min, and body temperature 37.5°C. He appeared chronically ill-looking and...
icteric. A tender mass, about 7cm in size, over the epigastric area was felt. Laboratory data disclosed a white blood count, 11210/cumm (normal range, 4000-9900/cumm), hemoglobin 14.3 g/dL (13.5-17.8 g/dL), platelet 486,000/cumm (150,000-450,000/cumm), serum amylase, 282U/L (30-110U/L), serum lipase, 1138U/L (20-300 U/L), aspartate aminotransferase, 61U/L (5-35U/L), alanine aminotransferase, 178U/L (0-40U/L), alkaline phosphatase, 224 U/L (42-128U/L), γ-glutamyl transpeptidase, 765U/L (< 60U/L), and total bilirubin, 5.4 mg/dL (0.2-1.6 mg/dL). Ultrasonography and computed tomography (CT scan) on admission demonstrated a huge cystic lesion, about 8 cm in diameter, located at the head of the pancreas with intrapancreatic calcification and dilatation of the biliary tract (Fig.1). Endoscopic retrograde cholangiopancreatography (ERCP) was performed. This

![CT scan and ERCP images](image-url)

**Fig. 1.** (a) CT scan demonstrating a large gall bladder (G) and dilated intrahepatic duct (arrow), (b) a cystic mass, 8 cm in diameter, located at the head of the pancreas with calcification (arrow head).

![ERCP images](image-url)

**Fig. 2.** (a) ERCP demonstrating a dilated common bile duct with tapering at the distal third (arrow). A mass shadow was seen around the distal bile duct (arrow head). (b) A guidewire was inserted through the pancreatic duct into the pseudocyst (short arrow) indicating the communication between the pseudocyst and pancreatic duct.
revealed a narrow segment at the distal common bile duct with proximal biliary dilatation. A cystic lesion communicating with the main pancreatic duct was also seen (Fig. 2). Endoscopic sphincterotomy and endoscopic nasopancreatic drainage were performed and whitish fluid ranged from 180 cc/day to 320 cc/day was drained. The nasopancreatic drain was replaced by an 11 French plastic stent eight days later (Fig. 3). Analyses of pancreatic ascites

Fig. 3. (a) The pseudocyst was drained by the nasopancreatic tube (arrow) initially, followed by (b) endoscopic transpapillary stenting (short arrow).

Fig. 4. (a) Repeated endoscopic pancreatogram 18 months later showed a small cystic dilatation of the pancreatic duct at the head region (arrow head) and the pseudocyst was not seen. (b) Cholangiogram during the same procedure demonstrating tapered ending of the distal bile duct and mild dilatation of the proximal bile duct.
rates were as follows: amylase, 94122 U/L; LDH, 87U/L; pro tein, 514mg/dL; sugar, 112 mg/dL. The cul ture of the aspirate yielded the growth of *Pro teus vulgaris, Mon ga nellia morganii, Stenotrophomonas maltophilia* and *Pseu domonas aerugi nosa*, but the blood culture revealed no bacte rial growth. Cy to log ical exami na tion of the as pi rate revealed no mali g nant cells. After treat ment with a broad-spectrum an ti bio tic and pan cre atic drain age by stent, the pa tient im proved and the ab do minal mass was not felt. Ultras onography 2 weeks later showed only mild di la ta tion of the com mon bile duct and the size of the pan cre atic pseudocyst was 3 cm in di ameter. The pa tient later lost to fol low up and con tinued to take al co hol. He was ad mit ted again at 18 months after dis charge due to re cur rent ab do minal pain. Re peat CT scan showed a marked de crease in the size of the pre vi ous pan cre atic pseudocyst (2.4 × 1.6 cm²) and swelling of the pan cre atic body and tail. Af ter re moval of pan cre atic stent, ERCP showed only a seg ment of cyst ic di la ta tion, about 2.4 cm in length, at the duct of the pan cre atic head and the pan cre atic duct at body was nor mal in size ta pered dis tal bile duct and mild di la ta tion of prox i mal bile duct was seen also (Fig. 4). Ab do minal pain sub sided after con ser va tive treat ment.

**DISCUSSION**

The causes of jaun dice in a pa tient with chronic pan cre ati tis include hepa tocel lar dis ease and mecha ni cal fac tors such as tran sient con stric tion of the in tra pan cre atic por tion of the com mon bile duct by pan cre atic edema or fi bro sis, pan cre atic can cer, and ex te rnal com pres sion by pan cre atic pseudocyst. Ob struc tive jaun dice solely due to com pres sion of the com mon bile duct by pan cre atic pseudocyst oc curs in about 14% of jaun dice pa tients due to com pres sion of the com mon bile duct by pan cre atic edema or fac tors such as tran sient con stric tion of the in tra pan cre atic duct of the pan cre atic head and the pan cre atic duct at body not felt. The clin i cal course of our pa tient was as fol lows: amylase, 94122 U/L; LDH, 87U/L; pro tein, 514mg/dL; sugar, 112 mg/dL. The cul ture of the aspirate yielded the growth of *Pro teus vulgaris, Mon ga nellia morganii, Stenotrophomonas maltophilia* and *Pseu domonas aerugi nosa*, but the blood culture revealed no bacte rial growth. Cy to log ical exami na tion of the as pi rate revealed no mali g nant cells. After treat ment with a broad-spectrum an ti bio tic and pan cre atic drain age by stent, the pa tient im proved and the ab do minal mass was not felt. Ultras onography 2 weeks later showed only mild di la ta tion of the com mon bile duct and the size of the pan cre atic pseudocyst was 3 cm in di ameter. The pa tient later lost to fol low up and con tinued to take al co hol. He was ad mit ted again at 18 months after dis charge due to re cur rent ab do minal pain. Re peat CT scan showed a marked de crease in the size of the pre vi ous pan cre atic pseudocyst (2.4 × 1.6 cm²) and swelling of the pan cre atic body and tail. Af ter re moval of pan cre atic stent, ERCP showed only a seg ment of cyst ic di la ta tion, about 2.4 cm in length, at the duct of the pan cre atic head and the pan cre atic duct at body was nor mal in size ta pered dis tal bile duct and mild di la ta tion of prox i mal bile duct was seen also (Fig. 4). Ab do minal pain sub sided after con ser va tive treat ment.

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**REFERENCES**


