

RECENT TRENDS IN THE  
MANAGEMENT OF  
PSEUDOPANCREATIC CYSTS

Essay

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# Dedication...

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## INTRODUCTION

**A***cute pancreatitis* presents as an acute surgical emergency, and severe cases may die within twenty-four hours (*Sutton, 1992*).

Acute pancreatitis is defined as non bacterial inflammation of pancreas caused by activation, interstitial liberation and digestion of the gland by its own enzymes autodigestion (*Schwartz, 1994*).

The two major causes of acute pancreatitis are biliary calculi which occur in 50-70% of pancreatitis and alcohol abuse which accounts for 25% of cases, the remaining cases may be due to rare causes or idiopathic.

The importance of etiology is that removal of causative agent or factor can avoid further episodes of pancreatitis and occurrence of complications, thus in a patient who has gallstone pancreatitis, gallstones should be removed as soon as the patient is fit to undergo surgery and preferably, before discharge from hospital (*Russell et al., 2004*).

Acute pancreatitis can be diagnosed by clinical findings (symptoms and signs), laboratory findings (CBC, serum amylase, serum lipase) and by imaging studies (x-

ray, ultrasound, CT scan with iv contrast) (*Gerand and Lawrence, 2003*)

Because of acute pancreatitis is sever disease and can kill patient and of surgical emergency, patient should be treated aggressively in intensive care unit (*Vipond, 2001*).

Sever episodes of acute pancreatitis may be associated with both systemic and local complications.

Systemic complications include respiratory insufficiency with ARDS, renal failure, depressed myocardial infraction.

Local complications include acute fluid collection, formation of pseudocyst, pancreatic necrosis (*Schwartz, 1994*).

But the principal complications of acute pancreatitis are abscess and pseupdocyst formation (*Gerand and Lawrence, 2003*)

*Pancreatic pseudocysts* are localized collection of fluid with high concentration of pancreatic enzymes, they occur usually as complication of pancreatitis, although some occur after trauma especially in children.

They called pseudocysts because unlike congenital cysts or cystic neoplasm, they lack of true epithelial lining. (*Schwartz 1994*).

Two different processes are involved in pathogenesis of pancreatic pseudocyst, extravasations of pancreatic juice and glandular necrosis form sterile pocket of fluid that is not reabsorbed as inflammation is subside (post pancreatitis) and ductal obstruction and formation retention cyst that loses its epithelial lining (alcoholics ,trauma victims).

Pseudocysts developed in about 2 % of cases of acute pancreatitis, the cysts are single in about 85% of cases and the remaining are multiple (*Gerard and Lawrence, 2003*)

*The diagnosis of pseudocysts is made:*

- a. Clinically where they suspected when patient with acute pancreatitis fails to recover after 5 – 7 days of treatment or after some improvement begin to deteriorate again.
- b. Laboratory studies in term of elevated pancreatic enzymes.
- c. Imaging study in form of ultrasonography, CT scan, Barium study and ERCP.

The principal indications for treating pancreatic pseudocyst are to improve symptoms and prevent complications (*Gerard and Lawrence, 2003*).

The management of pancreatic pseudocyst can be surgically or non surgical.

Surgical drainage is preferred by open or laparoscopic method.

Endosonography-guided pseudocyst drainage is simple minimally invasive approach that obviate the surgical exploration or Percutaneous drainage and it is modality of choice to drain pseudocyst is close proximity to stomach and duodenum (*Wiersema, 2001*).

## AIM OF THE WORK

The aim of this work is to discuss the recent trends in the diagnosis and the various modalities of treatment of pseudopancreatic cysts.

## ANATOMY OF PANCREAS

The name pancreas is derived from Greek (Pan) means all and (Krease) means flesh (*Russell et al., 2004*).

The pancreas is perhaps the most unforgiving organ in the human body, *leading most surgeons to avoid* even palpating it unless necessary. Situated deep in the center of the abdomen, the pancreas is surrounded by numerous important structures and major blood vessels. Therefore seemingly minor trauma to the pancreas can result in the release of pancreatic enzymes and cause life-threatening pancreatitis. Surgeons that choose to undertake surgery on the pancreas require a thorough knowledge of its anatomy. However, knowledge of the relationships of the pancreas and surrounding structures is also critically important for all surgeons to ensure that pancreatic injury is avoided during surgery on other structures (*Fisher et al., 2005*).

### Parts of pancreas:

The pancreas is an elongated structure that lies in the epigastrium and left abdomen, it is soft and lobulated and situated on the posterior abdominal wall behind the peritoneum, it crosses the transpyloric plane.