Bahrain Medical Bulletin, Vol. 33, No. 1, March 2011

Answers to Medical Quiz

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A.1. CT scan with IV contrast of the abdomen. Retroperitoneal giant cyst, containing debris and infected fluid, pushing the stomach against anterior abdominal wall.

A.2. Pancreatic pseudocyst.

A.3. Ultrasound of the abdomen.

DISCUSSION

A pancreatic pseudocyst is a collection of fluid around the pancreas. The fluid in the cyst is usually pancreatic juice, which has leaked from a damaged pancreatic duct. Pancreatic pseudocysts arise following an attack of acute pancreatitis. Often the patient may present many weeks after recovery from of an attack of severe acute pancreatitis. Pancreatic cyst may also occur after trauma to the abdomen, more often in children[1].

Symptoms can occur within days to weeks following the attack of pancreatitis. The symptoms include: abdominal pain, bloating, eating difficulty and vomiting[1,2].

Other symptoms are rare and related to complications of the pseudocyst, such as infection, pancreatic abscess, bleeding into the pseudocyst or bowel obstruction. Physical examination may reveal a palpable mass in the middle or left upper abdomen[2,3].

Ultrasonography or CT scanning is the preferred imaging modalities to diagnose and follow the course of pancreatic pseudocysts. A typical finding is of a fluid filled cyst around the pancreas[3,4].

The treatment is usually medical therapy to achieve adequate rehydration, analgesia, and pancreatic rest. In patients with severe pancreatitis, parenteral nutrition is initiated to prevent catabolism and in cases of intractable vomiting, nasogastric suction is indicated to achieve intestinal-pancreatic rest by eliminating gastric secretions in the duodenum. Antibiotic therapy is indicated for infections[4,5].

Many cases of acute pancreatic pseudocysts, smaller than 5 cm in diameter, are managed with observation for 4-6 weeks because most of these cysts resolve spontaneously by conservative treatment, usually total parenteral nutrition[4,5].

Surgical treatment is required in patients with symptomatic pancreatic pseudocyst if persistent for more than 6 weeks or larger than 5 cm[4,5].

Different modalities of surgical treatment for pancreatic pseudocysts are available. The type of surgical procedure depends on the location, size and the experience of the treating team. For cysts that occur in the body and tail of the pancreas either a cystojejunostomy or cystogastrostomy is performed. For pseudocysts that occur in the head of the pancreas, cystoduodenostomy is usually performed[4,5].

A laparoscopic cystogastrostomy or cystojejunostomy procedure for treatment of pancreatic pseudocysts has been used by utilizing minimal access techniques. Patients recover rapidly from this procedure and usually discharged home on the second day postoperatively[4,5].

Another procedure for treating pancreatic pseudocyst is percutaneous insertion of the drain into the cyst under guidance of CT or US. Because of the complications associated with this procedure, it is seldom recommend for drainage of pseudocyst. This procedure can be used in critical cases or in cases where other options are contraindicated[4,5].

Endoscopic drainage technique of pancreatic pseudocyst is performed by expert gastroenterologist, which involves creating a small opening between the pseudocyst and the stomach then inserting a stent into the pseudocyst. After complete resolution of the pseudo cyst, the stent is removed[6].

The outcome is generally good with treatment. Rare complications, such as, abscess formation or hemorrhage in the pseudocyst could occur in late presentation[7].

CONCLUSION

Pancreatic pseudocyst is a rare complication of acute pancreatitis in children. CT scan or US are the diagnostic procedure of choice. Most cases of pancreatic pseudocysts resolve by conservative treatment and surgical drainage by laparoscopy or endoscopy.

Submission date: 20.01.2011. Acceptance date: 20.2.2011

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