Conservative management of pancreatic injury: Case report and literature review

N Theofilou, F Barros, F Pugin, B Egger
Department of Surgery HFR Fribourg - Cantonal Hospital, CH-1708 Fribourg

BACKGROUND

Injuries of the pancreas or the duodenum occur in 3-5% of abdominal trauma. Diagnosis can be challenging due to the retroperitoneal location. We present a case of blunt abdominal trauma resulting in pancreatic contusion with pancreatic duct injury which was successfully treated non-operatively.

METHODS

A 42-year old male was transferred to the emergency room after a work accident with direct blow to the abdomen by a tree trunk. He underwent initial resuscitation, diagnostic evaluation and management based upon the ATLS protocol. Clinical examination revealed abdominal pain and tenderness. Laboratory studies showed leukocytosis associated with elevated amylase and lipase serum levels. A CT-scan showed pancreas contusion as well as a mesenteric root hematoma (Fig 1).

RESULTS

Non-operative management was performed. ERCP revealed pancreatic duct injury and a stent was placed (Fig 3). The patient was admitted to the Intensive Care Unit and parenteral nutrition was initiated. Imipenem (IV) and also octreotide (s.c) were administered to prevent complications such as pancreatic fistula, pseudocyst and intra-abdominal abscess. The patient was successfully discharged from hospital after initiation of oral diet and stent removal, 17 days later. A CT-scan four months later was normal (Fig 2).

DISCUSSION

Pancreatic trauma is rare and life-threatening but can be treated conservatively even in severe cases. CT-scan is the initial imaging test, while ERCP is the most accurate imaging technique to detect, localize and treat pancreatic ductal injury. Antibiotics and octreotide are used to prevent complications. Most low-grade (I and II) injuries can be treated conservatively (gastrointestinal decompression, nutritional support etc) with good results and in case of operative interventions, simple surgical techniques are usually needed (debridement, local repair of laceration, drainage). On the other hand, severe injuries (III, IV and V) including pancreatic duct injury, are usually managed with resection and reconstruction, but sometimes a conservative approach may be beneficial and successful as in the case presented.

REFERENCES

2. Huyn Soo K et al Gastroint Endosc 2001;(45);54.