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# Management of pancreatic trauma

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Pancreas is affected in severe abdominal trauma whether penetrating or blunt penetrating trauma such as stab wounds, gunshot wounds and shotgun wounds. Blunt trauma such as crush injury, blast injury or seatbelt syndrome which can be caused by one of the following forces: direct impact, deceleration, rotation, shear forces. The accurate and early diagnosis of pancreatic injury is important in order to decrease morbidity and mortality. Delay in the diagnosis and intervention causes increased morbidity and mortality in pancreatic trauma. The retroperitoneal location of the pancreas contributes to the delay in diagnosis as clinical signs may be masked and late in onset. Investigations that determine pancreatic injury include serum amylase level, radiological assessment by plain abdominal radiographies, ultrasonography, computerized tomography, endoscopic retrograde cholangiopancreatography and magnetic resonance cholangiopancreatography. CT is the imaging of choice in hemodynamically stable patients. Pancreatic injury can be categorized into five classes. Grade I: Minor contusion without duct injury or superficial laceration without duct injury, Grade II: Major contusion without duct injury or Major tissue laceration without duct injury, Grade III: Distal transection or parenchymal injury, Grade IV: proximal transection or parenchymal injury, Grade V: Massive disruption of pancreatic head.

**SUMMARY**-----  
--77 If there is no evidence of a ductal injury on fine-cut CT, nonoperative management is acceptable. Conservative management includes close observation and serial laboratory examinations. The majority of patients with a grade I or II injury, in which by definition the pancreatic duct is intact, underwent exploration alone or with drainage. Distal pancreatectomy was performed primarily in patients with grade III injuries. Anterior and lateral pancreaticojejunostomy are used in grade IV injuries. Patients with combined pancreatoduodenal are fortunately rare. Pancreaticoduodenectomy may be required in a small group of patients with extensive tissue destruction that couldn't be repaired by simple primary repair. Complications of pancreatic injury are seen in 20-40% of patients' and are higher in combined pancreatoduodenal injuries. Common complications are fistula formation, bleeding, pancreatic abscess, recurrent pancreatitis, and pancreatic pseudocysts. Pancreatic trauma in children is rare. Management strategies are diverse and controversial. In general, management of pancreatic trauma should be individualized depending on the site of injury, timing of referral, presence of associated injuries and institutional expertise. It is concluded that early diagnosis & grading of pancreatic injury will help in choosing the suitable treatment which varies

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from conservativemethods up to the surgical intervention.