Original Research Paper

Volume - 13 | Issue - 05 | May - 2023 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Surgery

NON OPERATIVE MANAGEMENT OF A CASE OF POLYTRAUMA WITH GRADE IV AAST PANCREATIC TRANSECTION

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ABSTRACT Here we discuss a case report of a patient with ploytrauma with grade IV pancreatic transection managed conservatively without any intervention. A 22 year old male came with a history of blunt trauma to abdomen , on CT with contrast patient had a near complete transection of pancreas between head and body, grade II liver laceration and complete occlusion of right renal artery .Patient was vitally stable and was monitored for change in abdominal girth and haemoglobin. Patient developed pancreatic ascites , and was discharged on day 10 with regular follow up , with endoscopic cystograstostomy after 8weeks.Through this case report ,we see that non operative management can be done for grade IV pancreatic transection ,thus reducing post operative morbidity and mortality.

KEYWORDS : Pancreatic transection, liver laceration, cystogastrostomy, renal artery occlusion.

INTRODUCTION

Pancreas is a J shaped, highly vascular, retroperitoneal organ and is not commonly injured during blunt trauma to abdomen. . Pancreatic injury can lead to significant complications like pancreatic pseudocyst , pancreatitis , sepsis and can cause significant mortality and morbidity. Although pancreatic injuries are associated with significant morbidity and mortality, early recognition is associated with significant reduction in morbidity and mortality.

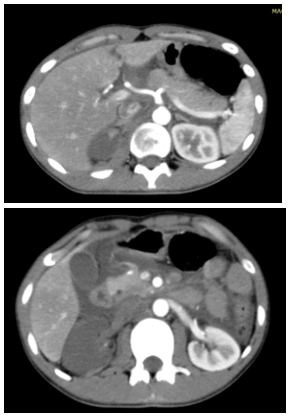
AAST(AMERICAN ASSOCIATION FOR THE SURGERY OF TRAUMA) is used for grading pancreatic injury, Grade IV AAST is proximal transection of pancreatic parenchyma which is usually managed by surgical intervention.

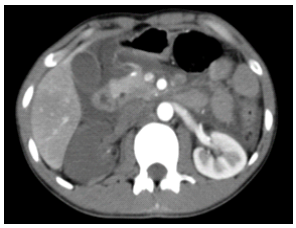
CASE REPORT

- A 22 year old male patient came with alleged history of blunt trauma to abdomen by fall of heavy object 1 day back. Patient had complaints of epigastric pain and vomiting and no other injuries.
- On examination- patient was hemodynamically stable with slight tenderness in epigastric region.
- Investigations(blood)- CBC-hemogolobin12.6g/dl, with serum creatinine 1mg/dl and serum amylase-530IU/l(raised). Rest of the blood parameters were within normal limits.

Radiological investigations-

CT(abdomen plus pelvis)with contrast-Near complete transection of pancreas between head and body, laceration of left lobe of liver2.4cm in depth(segment II and Iva), complete occlusion of right renal artery with no enhancement of renal parenchyma.





Ct (abdomen with contrast I/v)-showing pancreatic transection without any active blush

- COURSE- Patient was admitted in trauma ICU wing of the hospital. On admission patient was haemodynamically stable, after primary survey. Initially patient was given I/v crystalloids, and antibiotics . Nasogastric tube was passed to decompress the stomach .
- Patient was monitored for change in abdominal girth, hemoglobin, blood pressure and urine output.
- Patient developed fever with increase in abdominal girth on day2 with severe nausea. Antibiotics were hiked up and nasojejunal tube was passed under fluoroscopic guidance.
- Ultrasonography of abdomen was done which showed ascites. Diagnostic aspiration was done which was suggestive of pancreatic ascites(ascitic fluid amylase>1000)
- Patient was started on NJ feeds on day3 and early ambulation was done .
- On day8 patient was given a trial of oral feeds.
- Patient tolerated oral feeds well , afebrile and was discharged on day 10 after stopping antibiotics and all blood parameters were within normal limit, with plan of endoscopic cystogastrostomy after the ascites was localized(pseudocyst formation)
- FOLLOW UP- patient followed up weekly in out patient department to check for any significant increase in abdominal girth , fever and any change in hemodynamic status. wi
- CT with contrast was repeated after 2 months which showed 400cc cystic collection along head and body of pancreas(S/o pseudocyst) with right atrophic kidney.
- Endoscopic cystogastrostomy was done after2 months of trauma and patient tolerated the procedure well.

DISCUSSION:

After review of literature, AAST grade IV pancreatic injuries are mainly managed surgically, either by resection procedures or by drainage procedures, some cases can be managed conservatively although sufficient data is not available to support it.

Patients managed surgically usually have a high post operative mortality(25-30%), also have a high rate of post operative complications(30-40%). Studies have shown that traumatic renal artery occlusion with contralateral functioning kidney are mainly managed conservatively.

Through this case report we can conclude that, patients with grade IV pancreatic transections who are haemodynamically stable can be managed without surgery, thus reducing the post operative morbidity and mortality.

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