

Practice pointers in severe acute pancreatitis

Opinion

What is clear in the management of severe acute pancreatitis?

- i. Abdominal pain with raised amylase or lipase is diagnostic of acute pancreatitis. Severe acute pancreatitis is pancreatitis with persistent organ dysfunction.
- ii. Acute Pancreatitis is essentially a sterile inflammation; there is no need to start an antibiotic prophylaxis in the acute phase. Consider Imipenem-cilastatin in later phase for infected pancreatic necrosis.
- iii. Goal directed rehydration within first 48 hours is beneficial in countering the SIRS response. Ringer's lactate is the fluid of choice for initial resuscitation.
- iv. Early feeding is justified as long as the gut is available. If patient has vomiting –nasogastric or nasojejunal are equally effective.
- v. CT scan - optimal time for the scan is after 4 days of initial onset of pain. Subsequently contrast enhanced CT scan is preferred prior to any intervention (Antibiotics/PCD /Surgery)
- vi. Step-up approach based on the multicentre dutch “PANTER” trial is validated as the optimal approach for infected pancreatic necrosis.
- vii. 40% of infected pancreatic necrosis can be readily treated by percutaneous drains (PCD's) itself. There's a concept of 'fluid under pressure' in the lesser sac which, if drained may shorten the inflammatory response.
- viii. Multiple percutaneous drains (PCD's) may be required in the same person and has been shown to reduce need for surgical intervention.
- ix. Surgical necrosectomy is delayed till devitalized pancreatic tissues are demarcated. Options are VARD (vide assisted retroperitoneal debridement) or minimally invasive pancreatic necrosectomy.
- x. Cholecystectomy can be combined with necrosectomy if safe to do so.
- xi. Keeping 2 drains in the necrotic cavity further helps irrigate and evacuate the necrosis in the retroperitoneal area.
- xii. Patient and family education and counseling regarding re-admissions for multiple interventions and follow up is of paramount importance in severe acute pancreatitis.¹⁻⁵

What is not clear in management of severe acute pancreatitis:

- i. Role of Ulinastatin in early acute pancreatitis

Possible benefit: The early use of ulinastatin in the patients with acute pancreatitis can decrease the levels of TNF- α , IL-6 and IL-8, reduce the inflammatory response, decrease intra-abdominal pressure and shorten abdominal pain scores with early recovery.

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- ii. Role of scoring systems in stratifying acute pancreatitis -does it help?

Each institution has a different way of assessing severity and older scoring systems having given way to newer objective ones. In this regard, CT severity index, APACHEII, CRP are widely practiced and useful for stratification. For all practical purposes, any acute pancreatitis patient with or without organ dysfunction has to be managed for 48hours as severe acute pancreatitis unless proved otherwise.

- iii. Sterile Necrosis or walled off pancreatic necrosis – if patient is asymptomatic, whether to intervene on a persistent walled off pancreatic necrosis.
- iv. Acute fulminant pancreatitis - Whether to go in or not? when the patient starts deteriorating in the first few days with organ dysfunction and requires supports for multiple organ systems.
- v. Role of EUS /ERCP -routinely in acute biliary obstruction can be debatable unless patient is in cholangitis or has persistent severe abdominal pain.
- vi. Role of feeding jejunostomy and transverse colectomy in all open necrosectomies - in severe acute pancreatitis has to be considered on case to case basis especially if intraoperative assessment of impending colonic perforation is likely.
- vii. Abdominal compartment syndrome - whether it is worthwhile monitoring in every patient who is diagnosed with severe acute pancreatitis to identify early intervention or selectively when patient is not improving inspite of maximal therapy.
- viii. Endoscopic necrosectomy –is it superior to VARD or Minimally invasive necrosectomy? Probably it is based on the expertise and experience available locally in each centre.⁶⁻⁹

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Conflicts of interest

The author declares there is no conflict of interest.

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