Management of Acute Pancreatitis: “PANCREAS” Contains Eight Easy Steps to Remember the Treatment

Abdul Khaliq, Usha Dutta, Rakesh Kochhar, Kartar Singh

Department of Gastroenterology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

The most recent evidence-based medical findings for the management of acute pancreatitis has prompted us to propose the acronym “PANCREAS” (Perfusion, Analgesia, Nutrition, Clinical assessment, Radiological assessment, ERCP, Antibiotics, and Surgery) for easy remembrance and management in daily medical practice.

The PANCREAS Acronym

**Perfusion:** Fluid resuscitation to maintain urine output between 0.5 and 1.0 mL/kg/h. Oxygenation in order to keep saturation greater than 95% in severe pancreatitis [1].

**Analgesia:** Patient-controlled analgesia or traditional on demand analgesia including opioids [2].

**Nutrition:** Enteral feeding within 48 hours (plus/minus nasojejunal feeding) lowers mortality in severe acute pancreatitis [3].

**Clinical:** Bisap [4], APACHE II [5] or APACHE-O [6] scores for assessment and triage of cases. Management in high dependency areas or intensive care units according to the severity of the pancreatitis [7].

**Radiology:** Ultrasonography to detect gallstones, choledocholithiasis and local complications. Contrast-enhanced computed tomography (CECT) after 48-72 hours of pain onset to determine the degree and extent of necrosis. Percutaneous catheter drainage guided by ultrasound and CECT is helpful in the management of necrosis and also in bridging the time until surgery [8].

**ERCP:** To be carried out within 72 hours if cholangitis or severe acute pancreatitis with persistent obstruction exists [9].

**Antibiotics:** There is little evidence to support the role of prophylactic antibiotics for the prevention of infected necrosis. Empirical antibiotics may be started if infection is suspected. Percutaneous ultrasound or CT-guided aspiration for gram staining and culture sensitivity should orient the choice of antibiotics [10].

**Surgery:** Multi organ failure with necrosis not responding to conservative management including percutaneous catheter drainage, pseudo-aneurysm of the surrounding vessels with bleeding, infected necrosis, pancreatic abscess and bowel perforation [1, 2, 8].

**Conflict of interest** The authors have no potential conflict of interest

References


Key words Anti-Bacterial Agents; Cholangiopancreatography, Endoscopic Retrograde; Emergency Treatment; Pancreatitis, Acute Necrotizing; Surgical Procedures, Operative

Correspondence Abdul Khaliq Department of Gastroenterology, PGIMER, Sector-12, Chandigarh India 160012 Phone: +91-991.401.2307; Fax: +91-172.274.4401 E-mail: abdulkhaliq_23@yahoo.com

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