Acute Pancreatitis

- is the autodigestion of the pancreas by its regurgitated own enzymes when they are in the active form.
- Etiological Factors
  - I GET SMASHED
  - Idiopathic
  - Gallstones
  - Ethanol
    - edema in the head of pancreas
  - Truma
  - Steroids
  - Mumps
    - And Coxaki B4
  - Autoimmune
  - Scorpion bite
    - Trinidad
  - Hyperlipidemia
    - Ischemia
  - ERCP
  - Drugs
    - H2 blockers
    - Thiazides
    - furosemide
    - Steroids
- Clinical Picture
  - General
    - Shock
      - Hypovolemic
        - Exudation
        - suppuration
        - hemorrhage
        - vomiting
      - Septic
    - Fever
    - Jaundice
    - Left Pleural Effusion
    - Acute Pulmonary Failure
    - Subcutaneous Necrosis
    - Cerebral Abnormalities
  - Localized
    - Peritonitis
    - Paralytic Ileus
    - Abdominal mass
      - inflammatory mass of pancreas
      - pancreatic abcess
      - pseudocyst
    - Cullen's & Grey turner signs
- Investigation
  - CBC
  - Serum electrolytes
  - Liver Function Test
  - Serum calcium
  - Blood glucose
  - Serum amylase
  - Serum amylase isoenzymes (S+P)
  - Urinary amylase
  - Amylase-creatinine clearance ratio
  - Serum lipase
  - Serum methemalbumin
  - Peritoneal fluid analysis
  - Chest X-Ray
  - Abdominal X-Ray
  - Barium meal
  - Ultrasound
  - CT-scan
  - MRI
- Ranson's Criteria
  - **GA LAW**
    - Glu >200 mg/dl
    - Age > 55
    - LDH > 350 IU/L
    - AST > 250 U/dl
    - WBC > 16000/cu.mm
  - After 48H **C HOBBS**
    - Ca+2 < 8 mg/dl
    - Hematocrite fall > 10%
    - PO2 < 60 mm.Hg
    - Base deficit > 4 meq/L
    - BUN rise 5mg/dl
    - Fluid sequestration > 6 L
  - Score
    - 0-2: 0%
    - 3-4: 15% admit to ICU
    - 5-6: 50%
    - 7-8: 100%
- Mortality rate
  - 20%
  - Causes of death
    - Hypovolaemic shock
    - Electrolyte disturbances esp. hypocalcemia
    - Toxemia
    - Renal failure
    - Respiratory failure
- DDx
  - Inferior MI
  - Perforated PUD
  - Acute cholecystitis
- Treatment
  - R-Regimen
  - Rest the pain
    - Pethidine 100mg/4hr + antispasmodic
  - Rest the pancreas
    - NPO, IV fluid
    - electrolytes replacement
  - Rest the bowel
    - NG tube
  - Resuscitation
  - Resist enzymatic activity
    - protease inhibitors
    - H2 antagonist
    - glucagon
  - Resist infection
    - Antibiotics
  - Repeated examination
  - Repeated serum estimations
    - Daily Ca+2
    - WBC
  - Respiratory support
  - pancreatic necrosis
    - peritoneal lavage
    - Pancreatic necrosictomy
    - laparostomy
- Complications
  - multi organ failure
  - Abscess formation
  - Cyst formation
    - form in the third week
    - ultrasound
    - In most of the cases the cyst regresses & disappears spontaneously
    - If not CTscan guided aspiration
    - laparotomy
      - gastrocystostomy
      - jejunocystostomy
  - Recurrent acute attacks
  - Chronic Pancreatitis
    - DM
    - steatorrhea