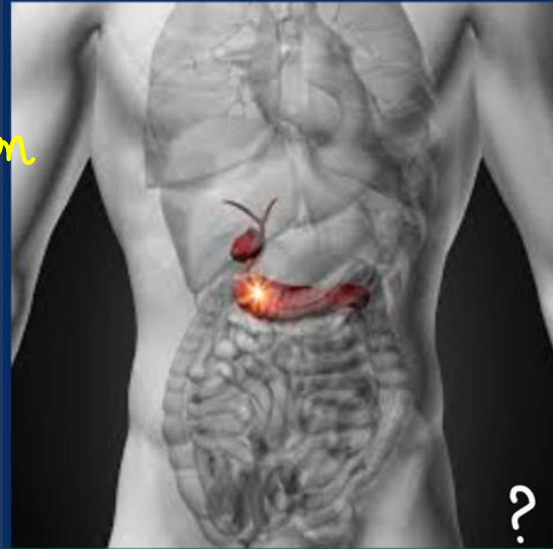


Pancreatitis

Pancreatitis

Must know clinical scenarios for NORCET

* epigastric pain radiation
To Back
↓
acute Pancreatitis



* flank pain ± radiation to Umbilicus
Renal colic?

* Fat, forty, fertile ♀
RUQ pain ± vomiting
? cholecystitis
due to cholelithiasis

Nursing Priority Actions & Management

IOC: CECT Abdomen
acute pancreatitis

Definition

Inflammation of pancreas and leakage of pancreatic enzymes into surrounding tissues

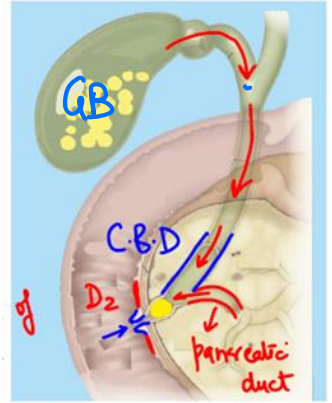
Leading cause of acute pancreatitis

↳ CHOLEDOCHOLITHIASIS
Stone in CBD

Leading cause of chronic pancreatitis

↳ alcohol

Ambulla of
VATER



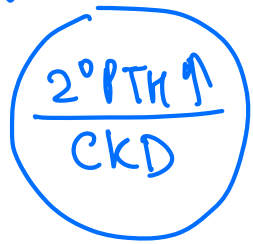
MC site DU: D1

// // GV: lesser curvature of stomach

Causes of pancreatitis

- 1. Alcohol and gall stones in CBD
- 2. Lipids → HYPER TRIGLYCEREMIA > 500 mg/dL
- 3. Hypercalcemia
- 4. Hyperparathyroidism STONES - BONES - MOANS - GROAN
- 5. PUD ulcers near the ampulla of VATER
- 6. Cystic fibrosis: MUCOVISCIDOSIS

1°



//

Leading cause of chronic pancreatitis in child is trauma

Pathophysiology of damage seen in pancreatitis

In acute pancreatitis trypsinogen gets activated in the acini itself causing Autodigestion of surrounding tissue ✓

Exocrine component of pancreas produces enzyme like

1. Amylase ↓ MALABSORPTION
2. Lipase ↓

Lack of these would cause osmotic diarrhea, steatorrhea
bulky foul smelling stool

Endocrine component of pancreatic damage causes

↳ HYPERGLYCEMIA
2° diabetes mellitus

└ Bedside index

Ranson's Criteria ¹ (1 point each)	BISAP Score ² (1 point each)
On Admission: <ul style="list-style-type: none"> •WBC >16,000/μL •Age >55 years •Glucose >200 mg/dL •AST >250 IU/L •LDH >350 IU/L 	B UN >25 mg/dL I mpaired mental status S IRS <i>systemic inflammatory response syndrome</i> A ge >60 P leural effusions No complex labs required
Within 48 Hours of Admission: <ul style="list-style-type: none"> •Hct decrease >10% •BUN increase >5 mg/dL •Serum calcium <8 mg/dL ✓ •Arterial pO₂ <60 mmHg ✓ •Base deficit >4 mEq/L •Fluid needs >6 L ✓ 	BISAP score <2 → 0-0.5% mortality BISAP score = 2 → 2% mortality BISAP score ≥ 3 → 5-20% mortality

Criteria for severity of acute pancreatitis

RANSON CRITERIA

- age > 55yr
 - TIC
 - glucose ↑
 - AST ↑
 - LDH ↑
- on admission

SIRS: Temp ↑/↓ HR ↑ RR ↑ WBC ↑/↓ = 2+1/4

Nursing assessment



CULLEN
SIGN

GRAY
TURNER
SIGN

1. Left upper quadrant pain or mid epigastric pain with radiation to **BACK**
 2. Pain increases after fatty meal/ alcohol intake or lying on back
relief on sitting up!
 3. Nausea, vomiting
 4. Abdominal tenderness, guarding and reduced bowel sounds
↓
- Cullen sign: **BRUISING ⊕: UMBILICUS**
- Gray turner sign // : **FLANK**
 5. Weight loss
- IOC of acute pancreatitis **CECT Abdomen**

Nursing interventions in acute pancreatitis

1. NPO

2. IVF

3. TPN: Total parenteral nutrition: → int jugular vein
Subclavian vein

4. NG Tube

5. Opiates and PPI: ↓ **EROSIVE GASTRITIS**

↓
pneumothorax ↑
risk

*

- Notify PHCP in case of following

1. Increasing pain and lump in epigastrium: pseudopancreatic cyst

2. ↓ Low BP, RR increase and drop in spO2 ↓

3. Jaundice

4. Mustard yellow urine

5. Clay color stool

OJ ← stones in CBD #
" " ampulla of Vater



Complications of acute pancreatitis

1. Pseudo-pancreatic cyst *epigastric lump +++*
2. ARDS
3. MODS

↳ *2 organ malfunction*



ampulla of Vater

pancreatic Juice

Indications of ERCP with endoscopic papillotomy and stenting in AP

Clear indications of ERCP in AP (must-do)	<ul style="list-style-type: none"> • <u>Bile duct stones in patients with severe pancreatitis</u> Cholangitis • Poor candidates for cholecystectomy • Postcholecystectomy • Strong evidence of persistent biliary obstruction
Intermediate indication of ERCP in AP (can-do)	<ul style="list-style-type: none"> • High suspicion of bile duct stones and indication of therapy
Contraindication of ERCP in AP	<ul style="list-style-type: none"> • Low to intermediate suspicion of retained bile duct stones, Cholecystectomy planned
Based on Banks, Freeman et al (8).	

*FEVER
RUQ PAIN
Jaundice*

*ERCP ⇒ Acute biliary pancreatitis ± cholangitis
 " " " ± biliary obstruction*

Chronic pancreatitis

Nursing assessment	Nursing intervention
1. Abdominal pain 2. Steatorrhea 3. Osmotic diarrhea 4. Weight loss 5. Jaundice 6. Diabetes mellitus 7. Anemia 8. Muscle mass	1. Normal dietary fat 2. Increase protein intake 3. Pancreatic enzyme supplement 4. Eat less refined carbs like Maida 5. INSULIN as required

lipase ↓: fat ++
 amylase ↓: sugars ++
 osmotic diarrhea

2° DM

Inform PHCP if

- Steatorrhea occurs inspite of supplements
- Skin breakdown due to fistula
- HbA1c increasing inspite of insulin

= 2° DM βcell ↓

extra mile

Bed side screen for suspected sepsis

qSOFA = quick sequential organ failure assessment

CRP > 100 mmg
 Lactate > 2 mmol/L

HAT

1. Hypotension $\text{SBP} < 100 \text{ mmHg}$
2. Altered mentation $\text{GCS} < 15$
3. Tachypnea $\text{RR} > 22$

Great things come from
hard work and
perseverance. No excuses.