Common GI Problems for Board Examination

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General Techniques
- Good light but private
- Good exposure: xiphoid to pubic symphysis
- Warm hands and stethoscope
- Approach calmly, avoid quick unexpected movement
- Watch patient face
- Avoid long fingernails
- Examine pain area last

Special Techniques
- To relax patient’s abdomen
  - Drawing up patient’s knees
  - Deep breathing
  - Engaging patient with conversation
  - Ticklish patient
  - Self palpation, patient’s hand under yours
  - Use diaphragm of the stethoscope as palpating instrument
Palpation of Liver

Parallel to costal margin

Parallel to rectus M.

Middleton or Hooking Technique
Palpation of the Spleen

Supine

Decubitus

Middleton or Hooking
Percussion of the Spleen

Castell’s method

Nixon’s method

Traube’s space
Cirrhosis

- Eyes
  - Anemia
  - Jaundice
  - Kayser-Fleischer’s rings
- Signs of chronic liver disease
- Flapping tremor (asterixis)
- Fetor hepaticus
Signs of Chronic Liver Diseases
1. Jaundice
History Taking of Jaundice Patients

Define the type

Define the cause

Define the severity
History Taking of Jaundice Patients

Define the type

- Anemia $\rightarrow$ hemolytic
- Malaise, fatigue, N-V, dark urine $\rightarrow$ hepatocellular
- Pruritus, pale stool, dark urine $\rightarrow$ cholestasis
- Jx only $\rightarrow$ hepatocellular or cholestasis $\rightarrow$ wait for LFT
History Taking of Jaundice Patients

- **Hemolytic**
  - Onset since childhood → Thalassemia, HS
  - Recent onset → AIHA

- **Hepatocellular**
  - Prodomes (flu-like) → VH
  - Drugs & herbs → DILI
  - Alcohol → AH
  - No clues → AIH, WD, drugs

- **Cholestasis**
  - Pain, wt loss, mass → obstructive jx
  - Pruritus precedes jx, no pain, → intrahepatic cholestasis
    - Drugs
    - PBC (fatigue, pruritus for years)
    - Sepsis
    - Thyrotoxicosis
    - Congestive hepatopathy
History Taking of Jaundice Patients

- Somnolence, day-night reversal
- Bruise, ecchymosis
- Hypoglycemia

Define the severity
Physical Exam of Jaundice Patients

- **GA**
  - Jaundice, pallor, edema
  - Signs of CLD → CHB, AIH, WD, cirrhosis
  - Flapping tremor

- **Hepatomegaly**
  - Soft → hepatitis, congestive hepatopathy
  - Firm → cirrhosis, infiltrative liver disease
  - Hard → malignancy, amyloidosis
  - Left lobe hypertrophy → cirrhosis

- **Splenomegaly** → cirrhosis, thalassemia, HS

- **Ascites**
  - With edema → cirrhosis
  - No edema → malignant biliary obstruction + carcinomatosis peritonei → PR for rectal shelf

- **PR for rectal shelf and stool color**
LFT of Jaundice Patients

- **Hemolytic**
  - IB >70%

- **Hepatocellular**
  - DB >50%
  - ALT >5x

- **Cholestasis**
  - DB >50%
  - ALT <5x
  - Elevated bilirubin only
    - ALP >3x
    - ALP normal
      - EHC or IHC
        - US
      - IHC
        - Gilbert or Crigger-Najja
        - Dubin-Johnson or Rotor

- **Inherited**
  - IB
  - DB
2. Dysphagia
Dysphagia

Difficult in initiating swallowing & Choking

Yes

Oropharyngeal

Solid only

Progressive

Age >50
wt loss

Cancer

Heartburn

Peptic stricture

No

Esophageal

Solid & liquid

Progressive

Regurgitation

EE Ring Web

Achalasia

Heartburn

Scleroderma

Other motility disorders
3. Dyspepsia
Dyspepsia

Gastroduodenal
- FD, PU, Gastric CA
  - Meal-related
    - Improved by N-V
    - Burning
  - NSAID/night pain/UGIB
    - wt. loss/UGIB
  - Anemia, Epigastric tenderness, Mass (CA)
    - EGD

Hepatobiliary
- HB tumors
  - Hepatomegaly (GS)
- Jaundice, wt. loss
  - (Biliary colic)
- Jaundice, Signs of CLD, Hepatomegaly
  - LFT + US

Pancreatic
- Pancreatic CA
  - CP
- Back pain/wt. loss
  - Alcoholic/steatorrhea
- None
  - US/CT
4. Chronic Diarrhea
Chronic diarrhea

Any hints? → Focused work-up

Organic → Functional → Rome III → IBS

Small volume diarrhea (Lt-sided colon)

- Colon Ca
- Colitis/Ulcer
  - UC/CD
  - TB
  - Infectious
  - Ischemic
  - Radiation

Small bowel / Rt-sided colon

Large volume diarrhea

- Watery
- Malabsorption
- Dehydration
  - Hypo K+
  - NET
  - CT
  - CT, H2BT

Steatorrhea

CP, SIBO

Colonoscopy

Stool exam, SBFT, enterocopy
## Organic & Functional Diarrhea

<table>
<thead>
<tr>
<th></th>
<th>Organic</th>
<th>Functional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>&lt; 3 mo</td>
<td>&gt; 3 mo</td>
</tr>
<tr>
<td><strong>Course of diarrhea</strong></td>
<td>Progressive</td>
<td>Wax &amp; wane</td>
</tr>
<tr>
<td><strong>Nocturnal diarrhea</strong></td>
<td>+</td>
<td>Rare</td>
</tr>
<tr>
<td><strong>Constitutional Sx</strong></td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td><strong>Wt loss</strong></td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td><strong>Bloody/mucus bloody</strong></td>
<td>Probably present</td>
<td>Absent</td>
</tr>
<tr>
<td><strong>CBC/ESR/albumin</strong></td>
<td>Abnormal</td>
<td>Normal</td>
</tr>
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# Small- & Large Volume Diarrhea

<table>
<thead>
<tr>
<th>Site of lesions</th>
<th>Small volume</th>
<th>Large volume</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Left ½ colon</td>
<td>Small bowel or right ½ colon</td>
</tr>
<tr>
<td>Amount</td>
<td>Small</td>
<td>Large</td>
</tr>
<tr>
<td>Frequency</td>
<td>Frequent</td>
<td>Not frequent</td>
</tr>
<tr>
<td>Characteristic of stool</td>
<td>Watery or mucous bloody</td>
<td>Watery</td>
</tr>
<tr>
<td>Urgency/tenesmus</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>Lower abdomen</td>
<td>Periumbilical</td>
</tr>
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Clinical Hints to the Diagnosis of Chronic Diarrhea

- Flushing $\rightarrow$ carcinoid syndrome
- Tachycardia $\rightarrow$ thyrotoxicosis, carcinoid syndrome
- Aphthous ulcers $\rightarrow$ IBD, Behcet’s disease
- Arthritis $\rightarrow$ IBD, SLE, Whipple’s disease
- Lymphadenopathy $\rightarrow$ lymphoma, TB, AIDS, Whipple’s disease
- Peripheral neuropathy $\rightarrow$ amyloidosis
- Proteinuria $\rightarrow$ amyloidosis, SLE
- Dermatitis herpetiformis $\rightarrow$ coeliac disease
- Peptic ulcer $\rightarrow$ ZE syndrome
- Ataxia $\rightarrow$ Abetalipoproteinemia
Chronic Diarrhea with Marked Weight Loss

- Malabsorption
- Thyrotoxicosis
- Malignancy
- Intestinal TB
- IBD
- NHL
- Chronic pancreatitis
- AIDS-related diarrhea

Chronic Diarrhea with Fever

- Infectious diarrhea
  - Amoebiasis
  - TB enteritis
  - CMV colitis
  - *C. difficile*-associated diarrhea
  - Histoplasmosis
- IBD
- NHL
- SLE
Chronic Diarrhea with Clubbing of Fingers

- IBD
- IPSID
- Celiac disease
- Cystic fibrosis
- Whipple’s disease
- Cronkhite-Canada Syndrome
- Sarcoidosis
- Long standing chronic diarrhea

Chronic Diarrhea with Eosinophilia

- Parasites
- EoGE
- Lymphoma
- SLE
- Drugs-induced
- Food allergy
Flocculation of barium

Luminal dilatation

Loss of normal folds

Flocculation of barium

Malabsorption
TB
Crohn’s Disease
5. Ascites
Ascites

Leg edema / Weight

Leg edema ± Wt gain

Portal HT or hypoalbuminemia

Jaundice Cirrhotic risk

Portal HT

Signs CLD, splenomegaly

Hi - SAAG Lo - protein

Cirrhosis

DOE, PND

Elevated JVP hepatomegaly

Hi - SAAG Hi - protein

RHF

Periorbital edema

Hypoalbuminemia

+ foamy urine

Lo - SAAG Lo - protein

NS

- foamy urine

Lo - SAAG Hi - protein

PLE

Fever

+ rectal shelf

TB

No fever

No rectal shelf

CA

Peritoneal diseases

No fever
6. Hepatomegaly
7. Splenomegaly