Approach to common HPB presentations

GLMS CME Programme

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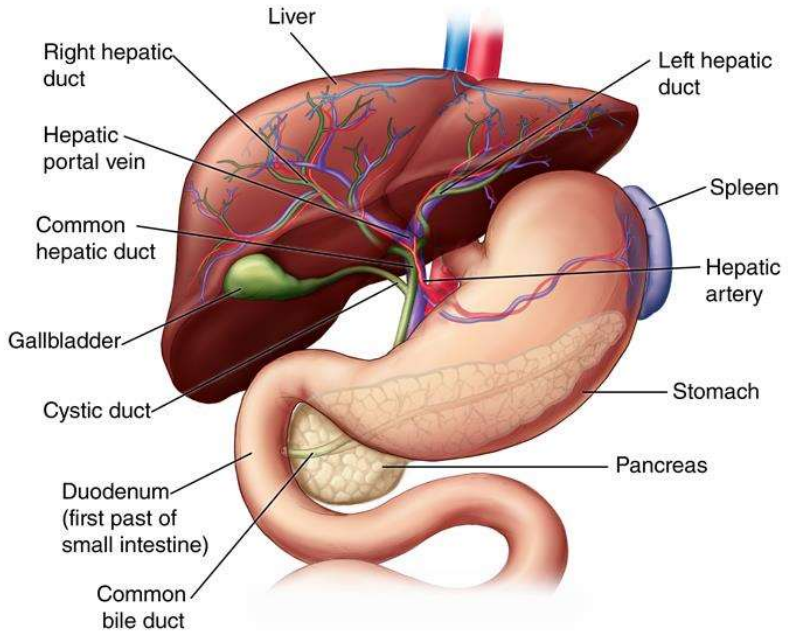
Greenlane Medical Specialists

Introduction

- When to suspect HPB disorders
- Initial investigations
- Four case scenarios of commonly encountered problems



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HPB symptoms - Pain

Biliary Pain

- **Temporary obstruction of biliary tree**
  - e.g. Stones, stenosis, sphincter of Oddi dysfunction
- **Epigastric or upper abdominal pain**
  - Radiate to subscapular area
  - Onset after fatty meals
  - 30 min-6 hours *
  - Occurs at different intervals (not daily) *
  - Does not improve with changes in posture or bowel mov

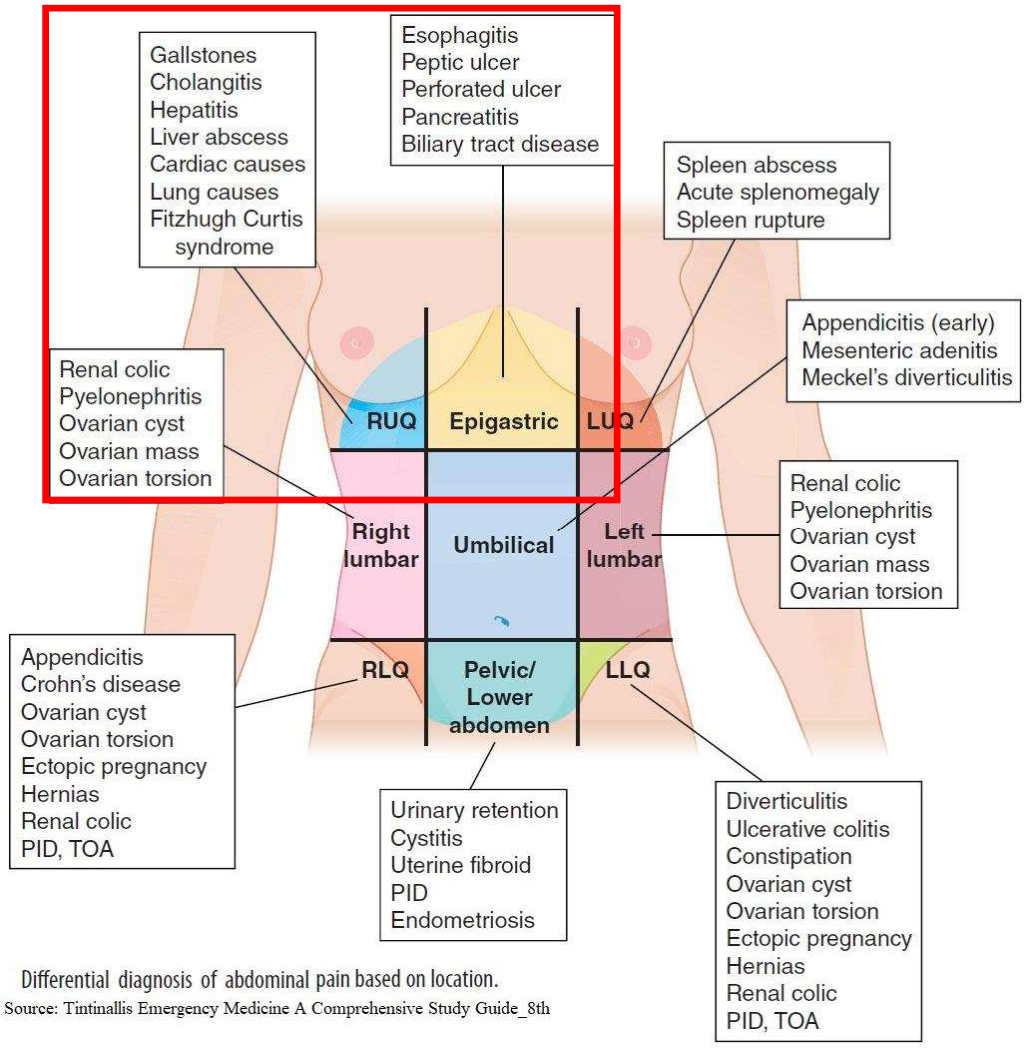
  *Pain and all * criteria required for Rome IV diagnostic Criter*
- **Prolonged or escalating pain +/- fever**
  - Prolonged obstruction or impaction of stone e.g. cholang

Hepatic capsule "stretch"

- RUQ pain→ shoulder e.g. hepatitis, abscess, mass, conge

Pancreatic pain

- Epigastric → radiating to back e.g. pancreatitis
- Constant, last days or longer, exacerbated with meals
- Pancreatic malignancy often painless



Differential diagnosis of abdominal pain based on location.
Source: Tintinallis Emergency Medicine A Comprehensive Study Guide_8th

HPB symptoms

Cholestasis

Jaundice, Pruritis, Pales stools, Dark urine

- Intrahepatic e.g. hepatitis and other liver disease
- Extrahepatic obstruction e.g. CBD stones, biliary or pancreatic tumour

Nausea vomiting

- If protracted, consider gastric outlet obstruction
  - Pancreatic malignancy, gastric or duodenal malignancy
  - Benign conditions e.g. peptic ulcer disease

Fever

- Usually something urgent
  - Infection e.g. cholangitis, cholecystitis, abscess
  - Inflammatory response e.g. hepatitis, pancreatitis
- May have peritonitis or unstable vital signs

Types	HAEMOGLOBIN	Causes

EMERGENT

- UNSTABLE VITAL SIGNS
- PERITONITIS
- ACUTE CONDITIONS SUSPECTED

➔ Hospital assessment usually required

URGENT "RED FLAGS"

- PROACTRED NAUSEA AND VOMITING
- PAINLESS JAUNDICE
- ADOMINAL MASS
- WEIGHT LOSS

➔ Urgent investigations inpatient versus outpatient

BEWARE

- Immunosuppression
- >65 years old
- Cognitive disability or impairment

➔ Associated with complications

Investigations – initial

Blood tests:

- **FBC, U&E, glucose, CRP, iron studies**
- **Coeliac serology**
- **Liver tests (Bilirubin, liver enzymes)**
  - Hepatocellular versus cholestatic?
  - Severity of derangement
  - Timing of liver injury
- **Amylase** or **Lipase**
- **Tumour markers** not usually helpful early on

Ultrasound

- Liver, vasculature, gallbladder, bile ducts, pancreas, kidneys, complications from gallstones
- Gold standard for gallstones (95% detected)

CT

- Not recommended routinely as an acute investigation in the community.

To consider:

- Dipstick urine analysis (pyelonephritis)
- Pregnancy test (if childbearing age)
- ECG (if cardiac risk factors)
- CXR (if suspect pneumonia)
- Upper GI endoscopy

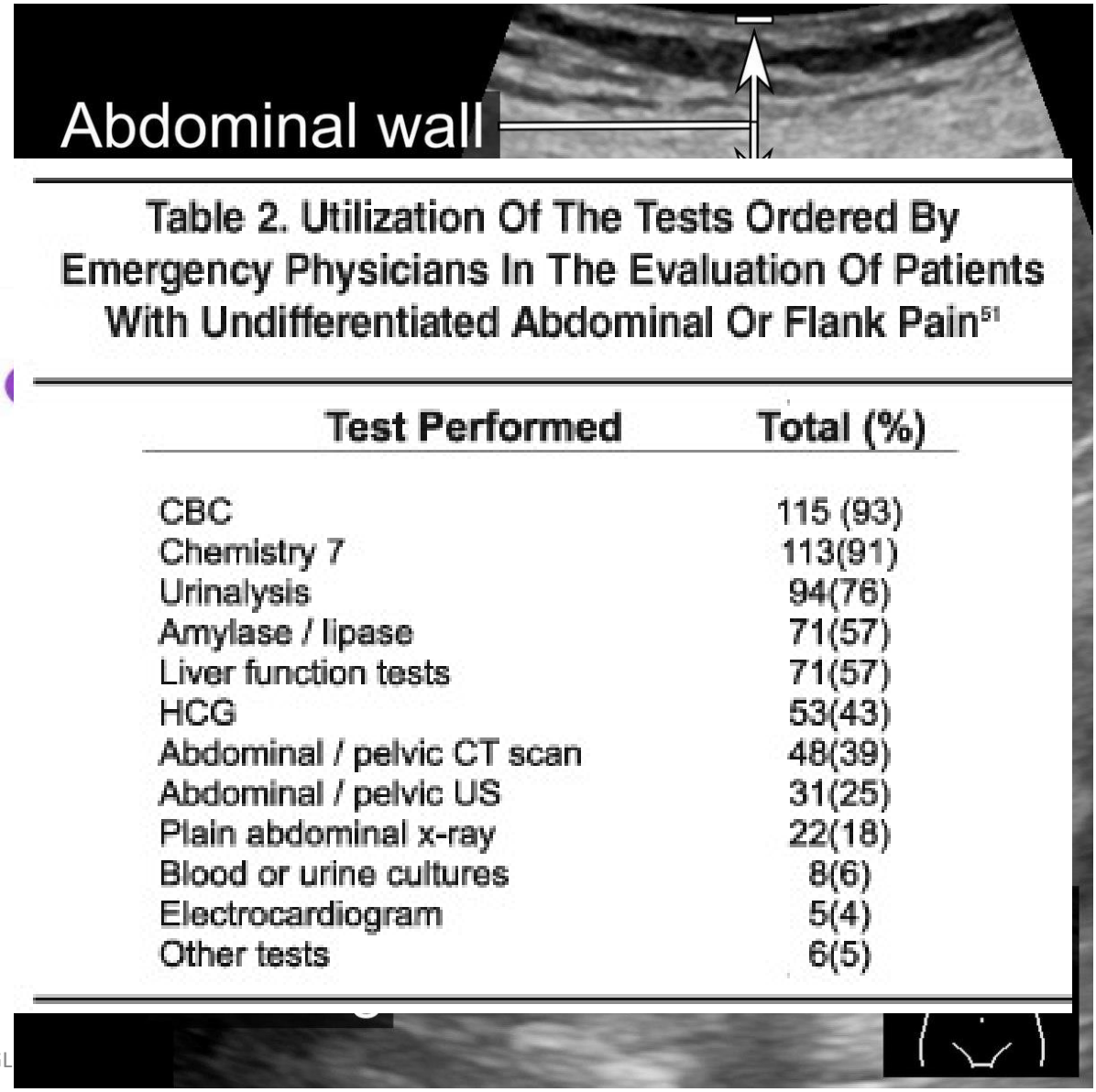
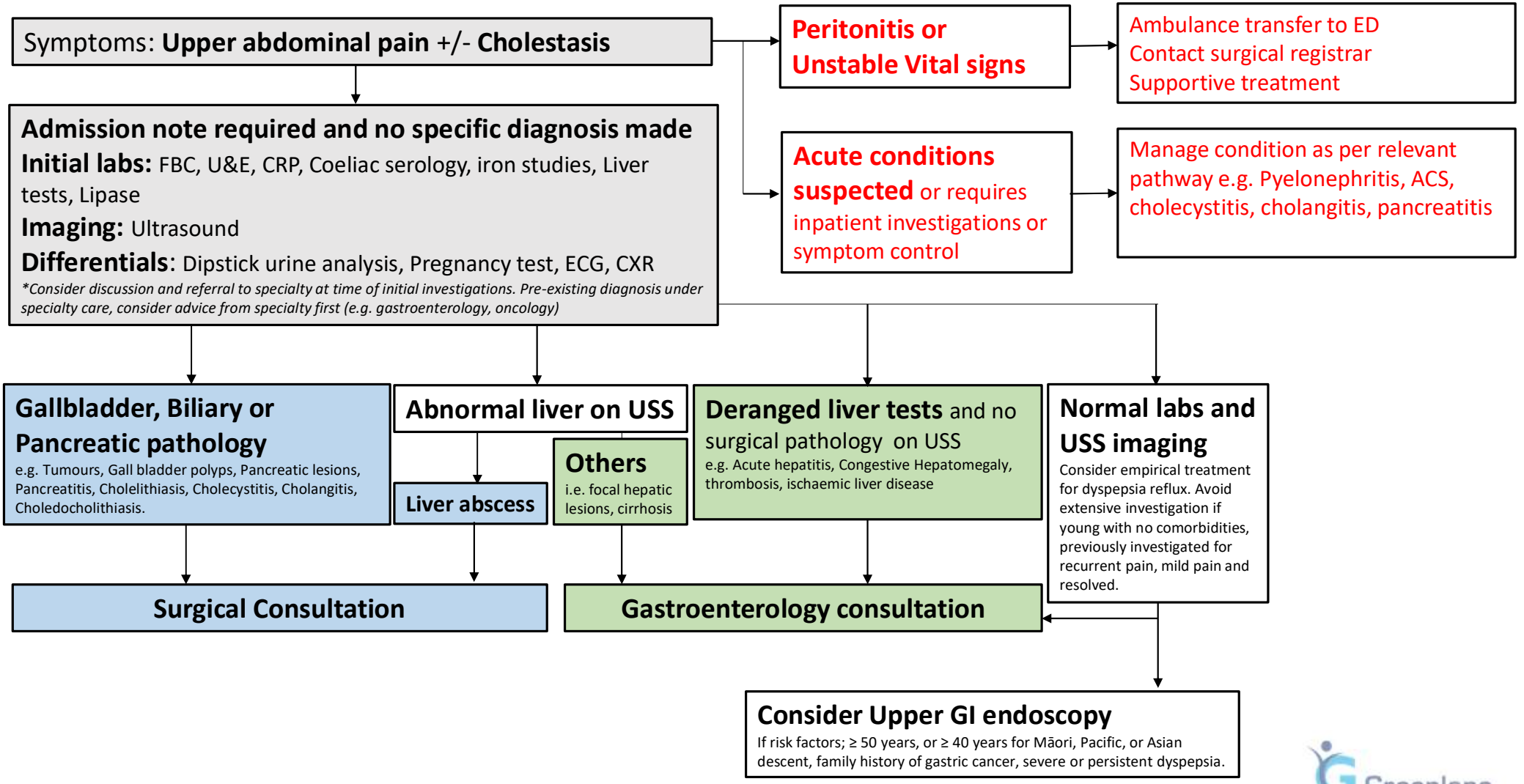


Table 2. Utilization Of The Tests Ordered By Emergency Physicians In The Evaluation Of Patients With Undifferentiated Abdominal Or Flank Pain[51]

Test Performed	Total (%)
CBC	115 (93)
Chemistry 7	113(91)
Urinalysis	94(76)
Amylase / lipase	71(57)
Liver function tests	71(57)
HCG	53(43)
Abdominal / pelvic CT scan	48(39)
Abdominal / pelvic US	31(25)
Plain abdominal x-ray	22(18)
Blood or urine cultures	8(6)
Electrocardiogram	5(4)
Other tests	6(5)



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Case 1: Mrs G 33yo ♀ teacher

- Right upper abdominal pain
- 2-3x a month, lasts a few hours
- Onset after eating fatty food “fried chicken”
- Not related to bowel movements or change in stool consistency
- Recently started Liraglutide, lost 8kg of weight

Medications:

- Liraglutide (Saxenda)

Examination:

- Comfortable, afebrile and looks v
- Not Jaundiced
- BMI 36kg/m^2
- Abdomen soft, no tenderness

Which of these are NOT risk factors for gallstones?

A) Obesity
B) Rapid weight loss
C) Moderate alcohol intake
D) Coffee
E) High caloric diet

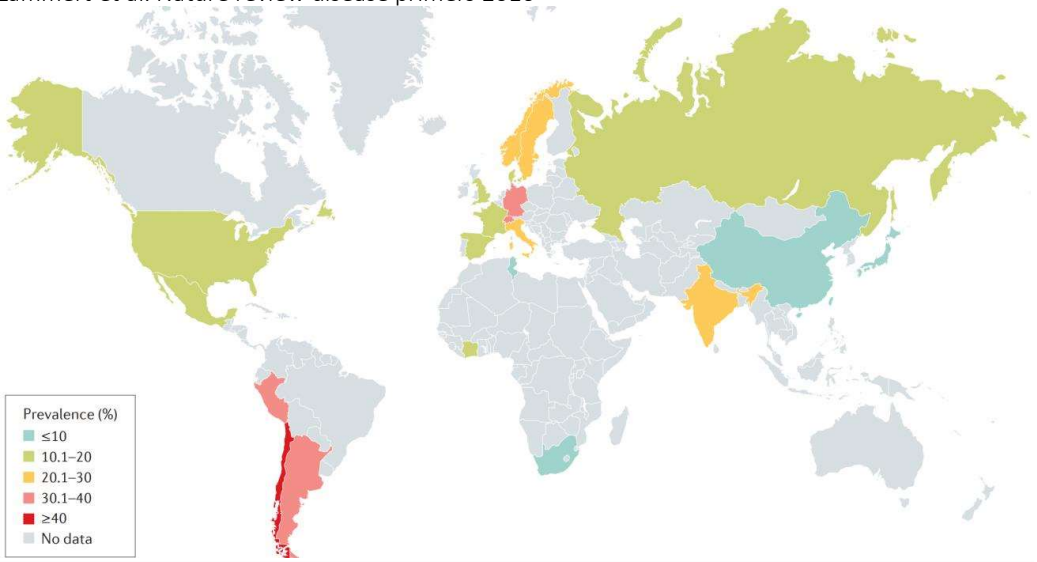
Gallstones

- ~20% of NZ adults
- Most asymptomatic
  - Cholecystectomy not recommended
- 30% develop symptoms,

  After 1st biliary colic, 1-3% complications/year

  versus 0.1-0.3% in asymptomatic
  - Cholecystitis
  - Choledocholithiasis
  - Cholangitis
  - Gallstone pancreatitis
- Common Risk factors
  - **Metabolic syndrome** (Espc. central obesity)
  - **Dietary factors** (High carloric, Low Fibre)
  - **Pregnancy**
  - **Drugs** (Octreotide, Fibrates, Hormone replacement therapy)
  - Factors causing gall bladder hypomotility (Prolonged fasting, **rapid weight loss or bariatric surgery**, weight cycling, spinal cord injury)
  - Increased enterohepatic bilirubin cycling

Diagnosis and therapy of biliary stones: When and how? UEG Vienna 2022
Lammert et al. Nature review disease primers 2016



Cholelithiasis and cholecystitis
In the SAXENDA clinical trials, cholelithiasis or cholecystitis was reported more commonly in SAXENDA-treated patients than in placebo-treated patients [see Section 4.8]. The majority of SAXENDA-treated patients with cholelithiasis or cholecystitis required cholecystectomy. Substantial or rapid weight loss can increase the risk of acute gallbladder disease; however the incidence was greater in SAXENDA-treated patients versus placebo-treated patients even after accounting for weight loss. Patients should be informed of the characteristic symptoms of cholelithiasis and cholecystitis.

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