Case 1: Mrs G 33yo ♀ teacher

- **Initial labs:**
  - FBC, U&E, CRP, Coeliac serology, iron studies, Lipase (N)
  - Mildly elevated **GGT** and **ALP**
  - Urine dipstick and pregnancy test (N)

- **Ultrasound: gallstone 10mm**.
  - No wall thickening, pericholecystic fluid, non-tender
  - Normal bile ducts dimensions

- **Surgical clinic**
  - Patient declined cholecystectomy
  - Avoid high fat food
  - Discharged from clinic, refer back if required

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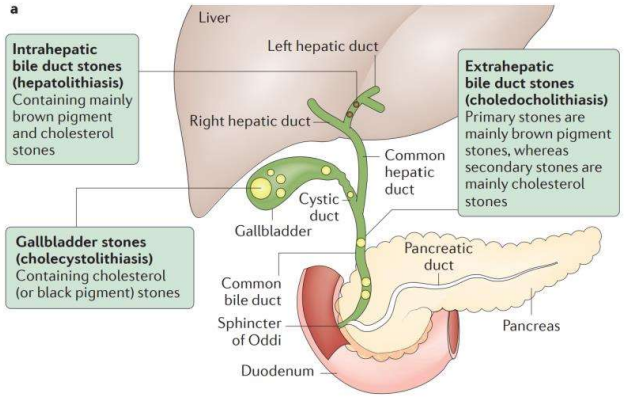
Case 1: Mrs G 33yo ♀ teacher

6 months later

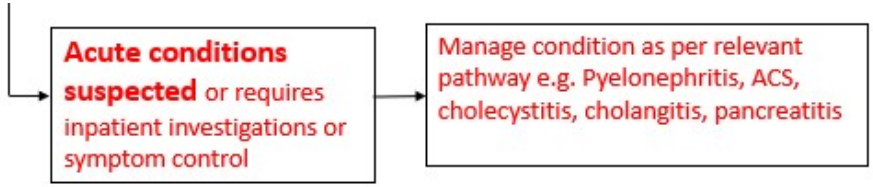
- Now 14 weeks pregnant
- Worsening RUQ pain 1/7
- Severe, prolonged compared to usual
  - Observations normal, afebrile
  - **Tender RUQ +**
  - No jaundice
  - No peritonism



Which is the least likely diagnosis?

A) Pancreatitis
B) Choledocholithiasis
C) Acute Cholangitis
D) Acute cholecystitis
E) Acute coronary syndrome
F) Mirizzi syndrome

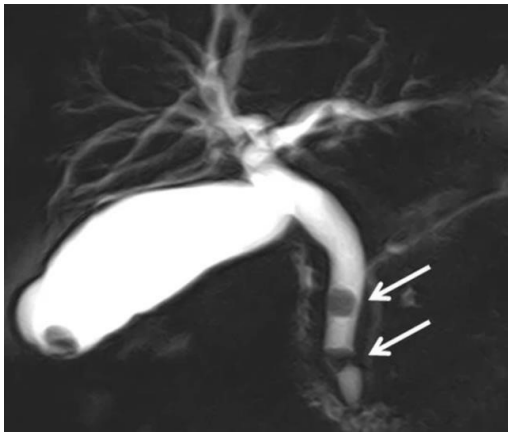
Case 1: Mrs G 33yo ♀ teacher



Transferred to ED for assessment

Oral morphine and paracetamol (NSAIDs contraindicated)

- Urine test normal
- **GGT 300, ALP 230,** Bili 9, CRP **23**
- USS **gallstones, CBD 10mm**, foetus ok
- MRCP **choledocholithiasis**
- ERCP removal of stones
- Pain settled discharged
- Cholecystectomy deferred



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Case 2: Mr I 46yo ♂ lawyer

- 2x episodes of upper abdominal pain last year
- 2-10 minutes, worse lying on the right
- No exertional pain or SOB
- Stressors at work ++
- “A bottle of whiskey every week”
- Appears anxious **“**My father had liver cancer”

Medications:

- Nil regular medications

Examination:

- Afebrile, vitals signs normal, BMI 25kg/m^2
- No Jaundice, lymphadenopathy , stigmata of chronic liver disease
- Abdomen soft, no masses

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Case 2: Mr I 46yo ♂ lawyer

- **Initial labs:**
  - FBC, U&E, CRP, Coeliac serology, Lipase (N)
  - **GGT 150, ALP 80, ALT 33, AST 82,** Bili 6, **Ferritin 1211**, transferrin saturation 0.32.
  - Urine dipstick (N)

- **Ultrasound:**
  - Diffusely echogenic liver
  - No features of cirrhosis
  - No gallstones and normal bile ducts
  - 5mm gall bladder polyp

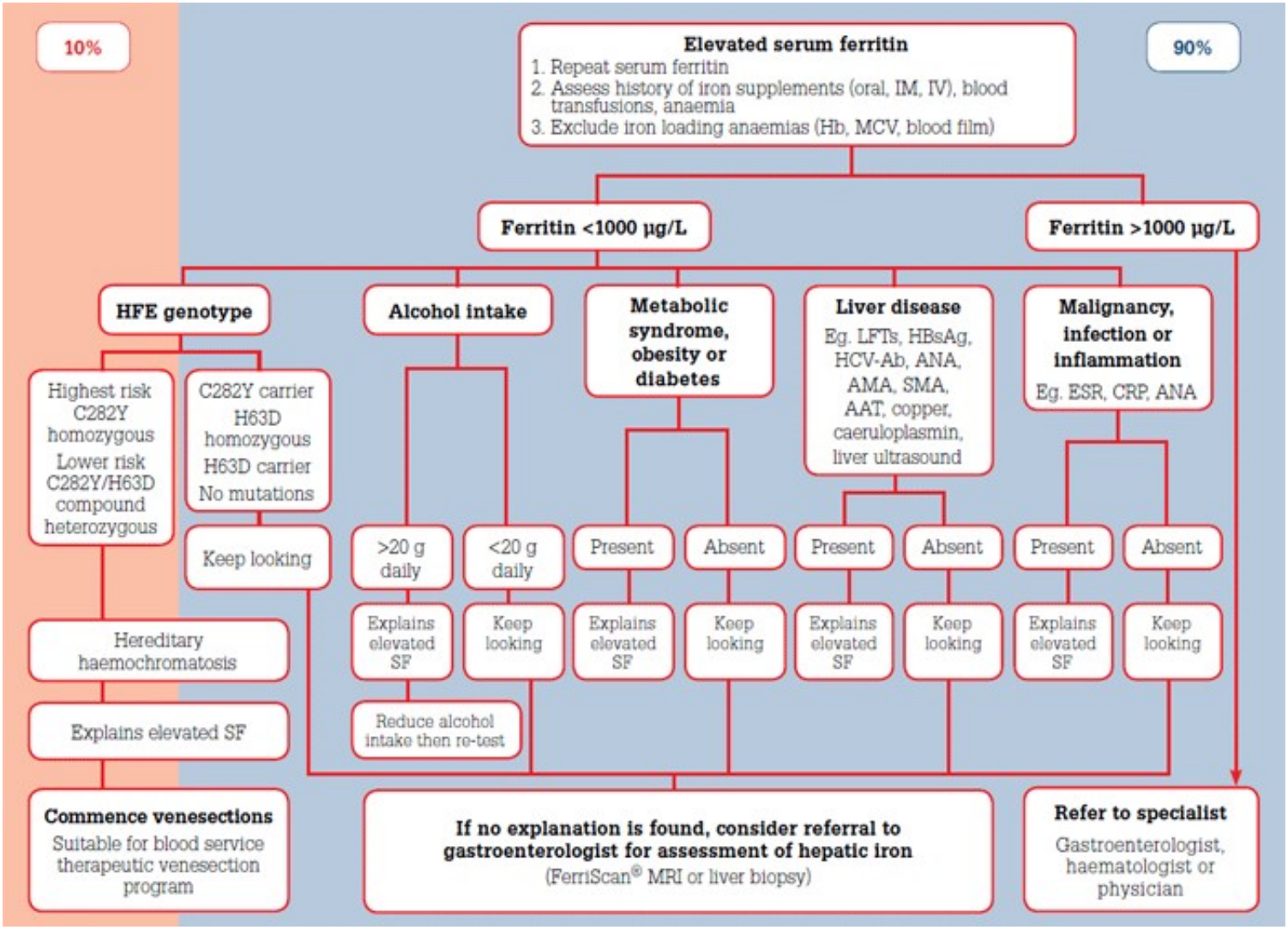
What is the MOST likely cause for Mr I's elevated Ferritin?

A) Metabolic syndrome
B) Malignancy
C) Hereditary Haemochromatosis
D) Alcohol related liver disease
E) Gall bladder polyp

Elevated Ferritin

- 90% from non-iron overload conditions, where venesection is NOT indicated.
- Hereditary Haemochromatosis (HH)
  - 1 in 200 people of Caucasian race are homozygous for the C282Y
  - Compound heterozygous H63D/C282Y and H63D homozygous have much lower penetrance (even if ferritin elevated, unlikely overload)
- Transferrin saturation is a better marker of iron overload than ferritin
  - >0.5 male
  - >0.45 females
- Ferritin <1000ug/L in HH is a good negative predictor for organ damage (particularly cirrhosis)

Investigation and management of a raised serum ferritin. British Society of Haematology guidelines 2018
Elevated serum ferritin: What GPs should know? Australian Family Physician 2012



Case 2: Mr I 46yo ♂ lawyer

- **Gastroenterology clinic for ? Significance of**
  - Deranged liver tests
  - High ferritin
  - Gall bladder polyp
- HH screen – no mutations detected
- Liver screen negative
  - Viral hepatitis A/B/C, CMV, EBV
  - Autoimmune: ANA, Anti-SM, Anti LKM, Anti-SLA, Anti-Mitochon
  - Metabolic: Hba1c, lipids
  - Alpha 1 antitrypsin, serum ceruloplasmin

Management:

- Decrease alcohol intake and lose weight
- Monitor liver tests and ferritin 6 monthly
- **No follow up required for gall bladder polyp**

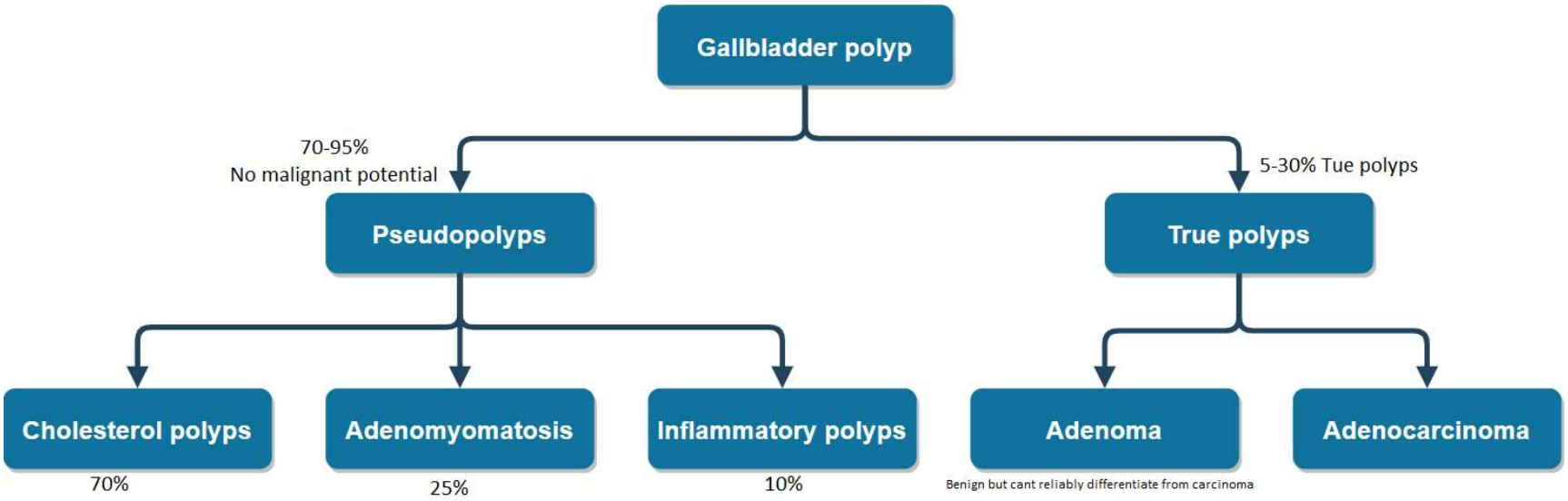
Which of these are true of Gall bladder GB polyps?

A) PSC patients with GB polyps are low risk
B) Asymptomatic GB polyps <6mm do not require routine surveillance
C) Small symptomatic GB polyps do not require intervention
D) Pseudo-polyps are rarer than true polyps

Gallbladder GB Polyps

Management and Follow up of gallbladder polyps. ESGAR; European Radiology 2017
Current practice and future prospects for the management of gallbladder polyps: A topical review. World Journal of Gastroenterology. 2018
Polypoid lesions of the Gall bladder: Disease spectrum with pathological correlation. Radiographics, 2015
Outcomes of Gallbladder Polyps and Their Association With Gallbladder Cancer in a 20-Year Cohort JAMA 2020.

- Evidence for optimum management is lacking
- **Ultrasound** is the main imaging for diagnosis and follow-up
- Prevalence on US detection 0.3-9.5%
- Surgical management if **cholecystectomy**
- General consensus is **polyps ≥10mm** should have **surgery** (low quality evidence)
- Management of **polyps <10mm** depends on **patient** and **polyp characteristics**



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