Aetiology of Splenomegaly

- Portal hypertension (33%)
  - Chronic liver disease
  - Portal/splenic venous obstruction; Budd-Chiari; heart failure
- Haematological (30%)
  - Lymphoproliferative (usually with nodes)
    - Leukaemias (AML, CML, ALL, CLL)
    - Lymphomas
  - Myeloproliferative (usually without nodes)
    - Myelofibrosis
    - Polycythaemia rubra vera (PRV)
    - Essential thrombocythaemia
  - Haemolytic anaemias
    - Hb disorders: Thalassaemia, sickle cell disease (eventually leads to splenic atrophy)
    - Red cell structure: Spherocytosis/elliptocytosis
    - Enzyme: G6PD deficiency, pyruvate kinase deficiency
- Infection
  - Viral hepatitis
  - EBV, CMV, HIV
  - Bacterial
    - Infective endocarditis
  - Foreign/tropical
    - Malaria
    - Schistosomiasis
    - Visceral leishmaniasis (Kala-azar)
  - Tuberculosis, brucellosis
  - Hydatid cyst
  - Splenic abscesses
- Infiltration
  - Amyloidosis
- Connective tissue disorders
  - SLE
  - RA (Felty's syndrome: triad of RA, neutropenia and splenomegaly)
- Splenic metastases
- Genetic
  - Gaucher's disease, Niemann Pick, Histiocytosis X

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History in splenomegaly

- Presenting complaint
  - Abdominal distension
- Abdominal pain
- Constitutional symptoms: nights sweats, fever, weight loss, malaise
- Abnormal bruising/bleeding

- Past medical history
  - Malignancy
  - Connective tissue disease

- Family history
  - Malignancy

- Social history
  - Alcohol consumption
  - Travel history
  - Risk factors for viral hepatitis (see pages on viral hepatitis)

### Examination of splenomegaly
- Anaemia
- Lymphadenopathy
- Signs of chronic liver disease
- Splenomegaly (differentiation from kidney)
  - Spleen has a medial notch, kidney doesn’t
  - You can’t get above the spleen (ribs overly it)
  - The spleen moves towards RIF with inspiration, the kidney moves posterior only (if at all)
  - The spleen is not ballotable like the kidney

### Initial investigation of splenomegaly
- Blood tests:
  - Full blood count
  - Blood film
  - Liver function tests
  - Urea and electrolytes
  - Autoimmune screen
  - Inflammatory markers
  - LDH
- Ultrasound of abdomen

### Further investigation and management of splenomegaly depends on cause but can include
- CT abdomen/pelvis
- Bone marrow aspirate and trephine
- Lymph node biopsy
- Full liver screen

### Common questions concerning splenomegaly
- What are the causes of splenomegaly by size of splenic enlargement?
  - See table on previous page