Examination of the Spleen

Wash your hands & Introduce the exam to your patient

Positioning & Draping

- **Position** the patient so that their abdominal muscles are relaxed. Therefore, the patient:
  - is lying flat
  - has arms at their sides
  - has a pillow

- **Drape** so that the abdomen is visible from the nipples to at least the Anterior Superior Iliac Spines (ASIS’s)

Inspection

- **Look for:**
  - masses, scars, and lesions (trauma)
  - atrophy/hypertrophy
  - discolouration
  - swelling
  - muscle bulk/symmetry
  - distended abdomen
  - **Splenomegaly** - a bulging mass may be seen emerging from under the Left costal margin extending diagonally towards the Right Lower Quadrant (RLQ)

Percussion (3 methods):

- **Percussion of Traube's Space**
  - boundaries - Left anterior axillary line, 6th rib, costal margin (see Figure 1)
  - this area should be resonant on percussion
  - dullness indicates possible splenic enlargement
• **Percussion by Castell’s method**
  o percuss in the lowest left intercostal space in the anterior axillary line (usually the 8th or 9th IC space – see Figure 1)
  o this space should remain resonant during full inspiration
  o dullness on full inspiration indicates possible splenic enlargement (a positive Castell’s sign)

**Figure 1:**

**The Landmarks for Traube’s Space and the area to percuss to elicit Castell’s sign**

![Diagram](image)

• **Percussion by Nixon’s method** (optional) (see Figure 2)
  o place the patient in right lateral decubitus
  o begin percussion midway along the left costal margin
  o proceed in a line perpendicular to the left costal margin
  o if the upper limit of dullness extends >8 cm above the left costal margin, this indicates possible splenomegaly
Figure 2:  
The landmarks used in Nixon’s Method

Palpation (4 methods)

- **Method #1**
  - begin palpation in the RLQ
  - direct the patient's breathing by telling them when to take a deep breath and when to exhale
  - while proceeding diagonally towards the Left Upper Quadrant (LUQ), try to palpate the spleen edge during each inspiratory phase

- **Method #2**
  - place your Left hand under patient’s Left posterior chest at pull upwards
  - with your Right hand, begin palpation in the RLQ
  - direct the patient's breathing by telling them when to take a deep breath and when to exhale
  - while proceeding diagonally towards the LUQ, try to palpate the spleen edge during each inspiratory phase
• **Method #3**
  o place the patient’s Left fist under their Left posterior chest
  o with your Right hand, begin palpation in the RLQ
  o direct the patient's breathing by telling them when to take a deep breath and when to exhale
  o while proceeding diagonally towards the LUQ, try to palpate the spleen edge during each inspiratory phase

• **Method #4 – The Hooking maneuver of Middleton** *(optional)*
  o place the patient’s Left fist under their Left posterior chest
  o position yourself on the patient’s Left side, facing the patient’s feet
  o using both hands, curl your fingers under the patient’s Left costal margin
  o ask the patient to take a long, deep breath → attempt to palpate the spleen with your fingertips