

SPLREEN

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SPLEEN:

- **Is apart of reticuloendothelial system (part of immunity and haemopiosis)**
- **75_150 gm**
- **Lying between 10_11 ribs posteriorly**
- **With impression of diaphragm ,colon ,stomach and Kidney**
- **The Hilum contain (splenic vessel and tail of pancreas)**
- **Red and white bulb**

FUNCTION OF SPLEEN

- **Immune function, Ig formation , white bulb**
- **Filtration of abnormal RBCs and bacteria**
- **Iron reutilization**
- **reservoir of blood volume**
- **Haemopoiesis**
- **Sequestration of platelet**

INVESTIGATION

- 1. Radiology to identify infarction, hydatid cyst**
- 2. Ultrasonography for consistency, size, cyst**
- 3. Radioisotope scanning T99 for life of RBCs**
- 4. CAT scan**
- 5. MRI**
- 6. Endoluminal ultrasound**

CONGENITAL ANOMALIES OF SPLEEN

➤ Absence of spleen

➤ Spleniculi → Hilum, greater omentum, tail of pancreas, mesocolon

Small spleen locating in the abdominal cavity

➤ HAMARTOMA : normal epithelium abnormally arranged

➤ Cyst: congenital → dermoid, hemorrhagic, serous

Rupture spleen

Blunt

Treated either conservatively or surgically according to degree of damage and association to damage to other organs

Penetrating

- 1_ stab wound
- 2_ Missile :
 - _ high velocity
 - _ low velocity

Surgery

You should do laparotomy surgery in penetrating trauma

CLINICAL TYPES OF RUPTURED SPLEEN:

- 1. Rapidly died patient from massive bleeding**
- 2. Initially shock then recovery due to resuscitation then signs of bleeding :**
 - Upper abdominal pain**
 - Distention**
 - Left shoulder pain (kehr's sign)**
 - Shifting dullness**
 - Fullness on PR examination**
- 3. Delayed rupture due to dislodgment of hematoma**

RADIOLOGICAL FEATURES :

- 1. Obliteration of splenic outline**
- 2. Obliteration of psoas shadow**
- 3. Indentation of gastric outline**
- 4. Fracture of one or two ribs**
- 5. Elevation of left hemi diaphragm**
- 6. Sentenile fluid level between loops of bowel**

Other investigations :

- **ultrasonography more popular than X-Ray**
- **CAT scan. Need more time and preparation**
- **MRI**

TREATMENT:

- **Splenectomy is routinely but lethal post splenectomy sepsis and pneumococcal infection in children lead to more conservative approach. Also in adult below 40 years old**
- **Partial splenectomy and suture of laceration**
- **Using Teflon mesh**
- **Auto transplant of splenic tissue (experiment)**

INDICATION OF SPLEECTOMY :

- **Trauma**
- **En-block in case of gastrectomy**
- **Hypersplenisim to reduce anemia, ITP or spherocytosis**
- **In Portal hypertension as part of shunt surgery**
- **Primary splenic pathology: cyst ,tumor, abscess**
- **Staging of lymphoma**

POST SPLENECTOMY COMPLICATION :

- **Hemorrhage due to slipped ligature**
- **Gastric dilatation**
- **Hematemesis**
- **Left side atelectasis**
- **Trauma to pancreas: fistula, abscess**
- **Gastric fistula**
- **Thrombocytosis and leukocytosis**
- **Post splenectomy septicemia :**
 - **S.pneumonia**
 - **Niesseria meningitides**
 - **Haemophilus influenza**

OPSI (OPORTUNSTIC POST SPLEECTOMY INFECTION)

- **Pneumovx 2 weeks pre op plus penicillin prophylaxis post op till 18 year**

Risk of OPSI increase in:

- **RADIOTHERAPY**
- **CHEMOTHERAPY**
- **SPLEENECTOMY for hemolytic disease**