

Hernias in General Surgery

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Definition

- Hernia = abnormal protrusion of a viscus or part of a viscus through a weakness in the wall that normally contains it
- Covered by a sac (peritoneum)
- Key components: Sac, Contents, Coverings

Epidemiology & Risk Factors

- Common surgical problem worldwide
- Male > Female (inguinal especially)
- Risk factors: Increased intra-abdominal pressure (cough, constipation, ascites, prostatism)
- Weak abdominal wall (previous surgery, obesity, aging)
- Congenital weakness (patent processus vaginalis)

Classification

- By anatomical site: Inguinal (indirect, direct), Femoral, Umbilical, Incisional, Epigastric, Spigelian, Obturator
- By clinical behavior: Reducible, Irreducible/Incarcerated, Obstructed, Strangulated

Inguinal Hernia

- Indirect: through deep ring → lateral to inferior epigastric vessels (congenital, young males)
- Direct: through Hesselbach's triangle → medial to inferior epigastric vessels (acquired, older males)
- Clinical: groin swelling, cough impulse, reducibility

Femoral Hernia

- Through femoral canal, below & lateral to pubic tubercle
- More common in females
- High risk of strangulation

Umbilical & Other Hernias

- Umbilical: at umbilicus (common in children & obese adults)
- Incisional: at previous surgical scar
- Epigastric: midline between xiphoid & umbilicus
- Spigelian: along linea semilunaris

Clinical Features

- Swelling (cough impulse, reducible)
- Discomfort or dragging pain
- Complications: Irreducibility, Obstruction, Strangulation (ischemia → necrosis)

Diagnosis

- Clinical diagnosis (inspection + palpation)
- Imaging: Ultrasound (for small/incisional/occult), CT scan (complex cases)

Management – General Principles

- Definitive treatment = Surgery
- Indications: all hernias except uncomplicated congenital umbilical hernia in infants
- Non-surgical (temporary): hernia truss

Surgical Options

- Tissue repair (Bassini, Shouldice) – rarely used
- Mesh repair: Open (Lichtenstein tension-free), Laparoscopic (TAPP, TEP)
- Emergency surgery if strangulated

Complications of Surgery

- Early: hematoma, seroma, wound infection
- Late: recurrence, chronic groin pain, mesh infection

Summary

- Hernia = protrusion of viscus through weakness
- Classified by site & reducibility
- Most common = inguinal hernia
- Complications: obstruction & strangulation
- Treatment is surgical (mesh repair = gold standard)