ONE-PAGE CHEAT SHEET

# Abdominal wall hernias

Anatomy, risks and repair

palsurgery.com
Free surgical teaching

## GROIN ANATOMY

- **Deep ring**: midpoint of the inguinal ligament, lateral to the inferior epigastric vessels
- **Superficial ring**: above and medial to the pubic tubercle
- **Hesselbach's triangle**: inferior epigastric vessels, rectus edge, inguinal ligament
- Femoral canal: inguinal ligament, lacunar ligament, pectineal ligament, femoral vein

## TYPES

- **Indirect inguinal**: through the deep ring, lateral to the epigastric vessels; commonest at all ages
- **Direct inguinal**: through Hesselbach's triangle
- **Femoral**: below and lateral to the pubic tubercle; high strangulation risk
- Others: umbilical, epigastric, incisional, Spigelian, obturator, Richter's, Littre's, Amyand's

## EXAMINATION

- Examine standing and lying, both sides, with a cough impulse
- Direct vs indirect is not reliable clinically: it is decided at surgery
- Ultrasound if the diagnosis is uncertain; CT for complex or incisional hernias

## MANAGEMENT

- Symptomatic inguinal: **mesh repair**, open Lichtenstein or laparoscopic TEP/TAPP
- Laparoscopic preferred for bilateral and recurrent hernias, and in women (occult femoral)
- Minimally symptomatic men: watchful waiting is reasonable
- **Femoral**: repair promptly
- Children: herniotomy without mesh; soon in infants. Umbilical hernias in children usually close by 4–5

## STRANGULATION

- Tense, tender, irreducible, red skin, obstruction, systemically unwell
- **Emergency surgery**: do not force reduction (reduction en masse)
- Richter's hernia can strangulate without obstruction

## EXAM PEARLS

- Obturator hernia: thin elderly woman, medial thigh pain (Howship-Romberg)
- After repair: chronic groin pain in up to 1 in 10, recurrence, seroma, testicular ischaemia
- Incisional hernia follows up to 1 in 5 laparotomies

Full page: **palsurgery.com/hernia/** · Test yourself: **palsurgery.com/mcq/hernia/**

© 2026 Dr. Mohammed Maree · Free to share for learning (CC BY-NC 4.0) · Educational use: follow local guidelines