

Abdominal wall hernia

- Hernia of the abdominal wall or external hernia (*herniae abdominalis externae*) is such surgical disease, which is characterized by protrusion of the visceral organs from the place of their physiological placement through the natural canals or defects of the abdominal and pelvic wall. In such case all visceral organs covered by parietal peritoneum and skin cover are not damaged.
- Internal hernia (*herniae abdominalis internae*) is such disease, visceral organs hit the peritoneal pouch. It formed in the place of natural peritoneum fold or recess and generally kept in the abdominal cavity.
Natural defects: umbilicus, inguinal ring, femoral ring, perineum area, diaphragm orifice диафрагмальные отверстия.
Unnatural defects: postoperative, posttraumatic defects etc.

Classification by etiology:

- **congenital**
 - *inguinal*
 - *Umbilical*
 - *diaphragmatic*
- **acquired**
 - *traumatic*
 - *postoperative*
 - *artificial*
 - *primary*
- **recurrent hernia**

areas
of the
abdominal
wall failure

Epigastric

Paraumbilical

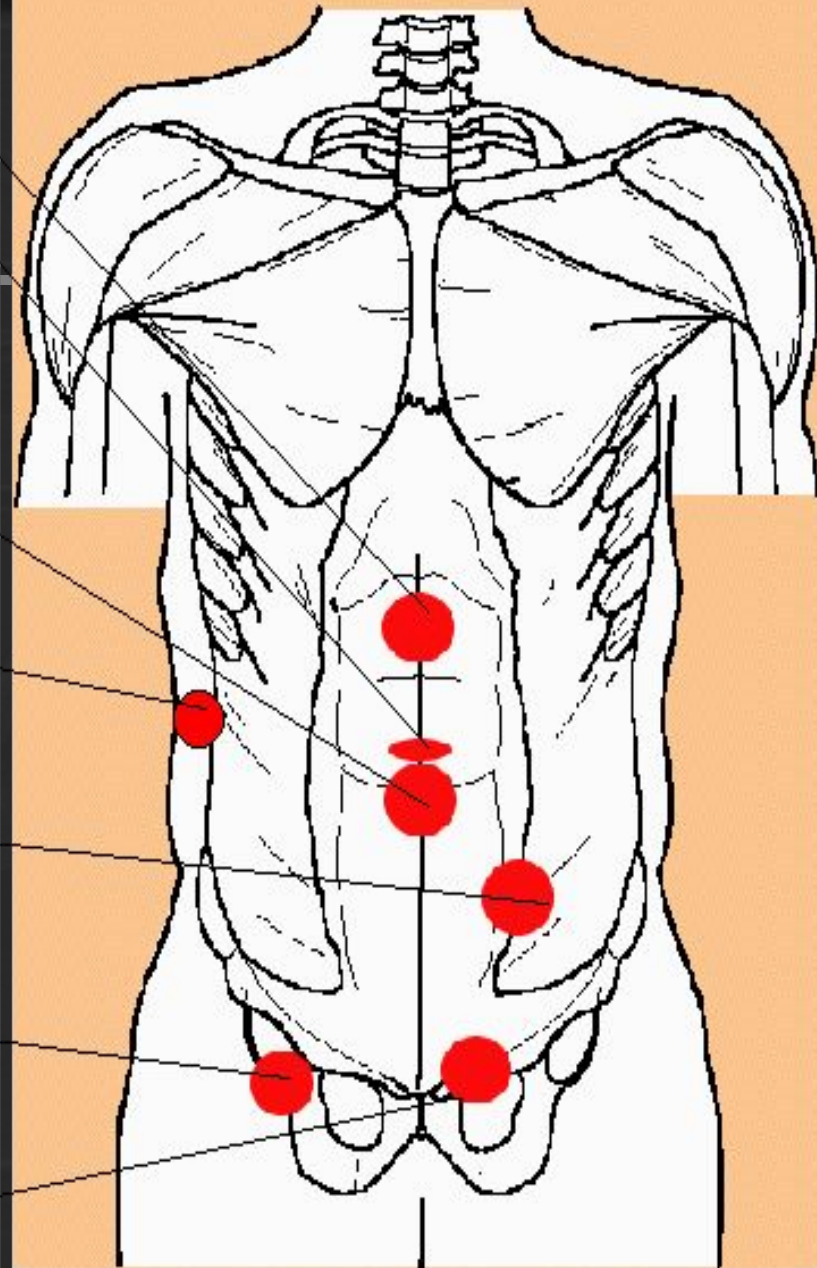
Umbilical

Lumbar

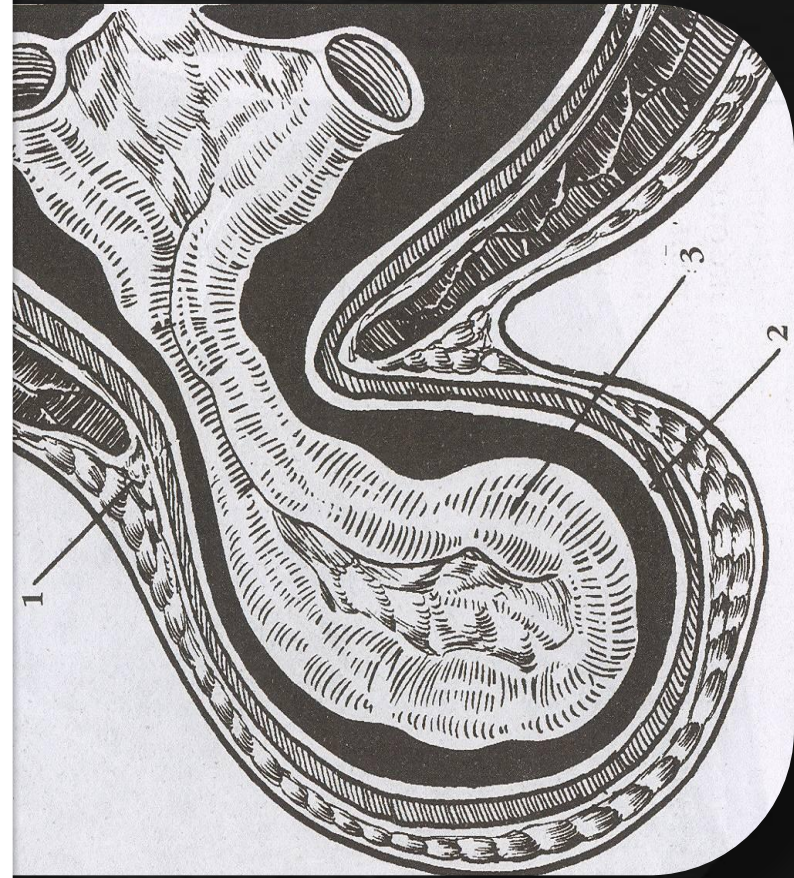
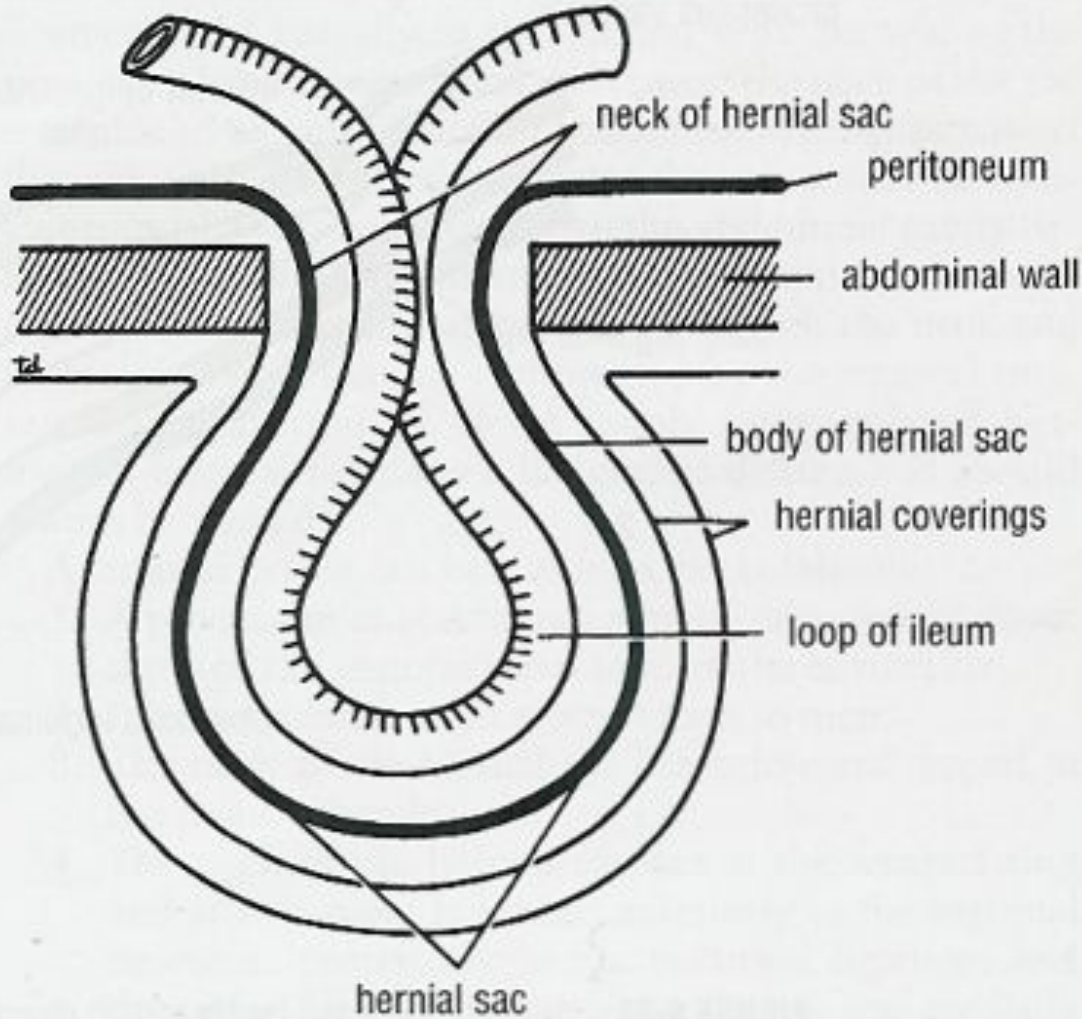
Spigelian

Femoral

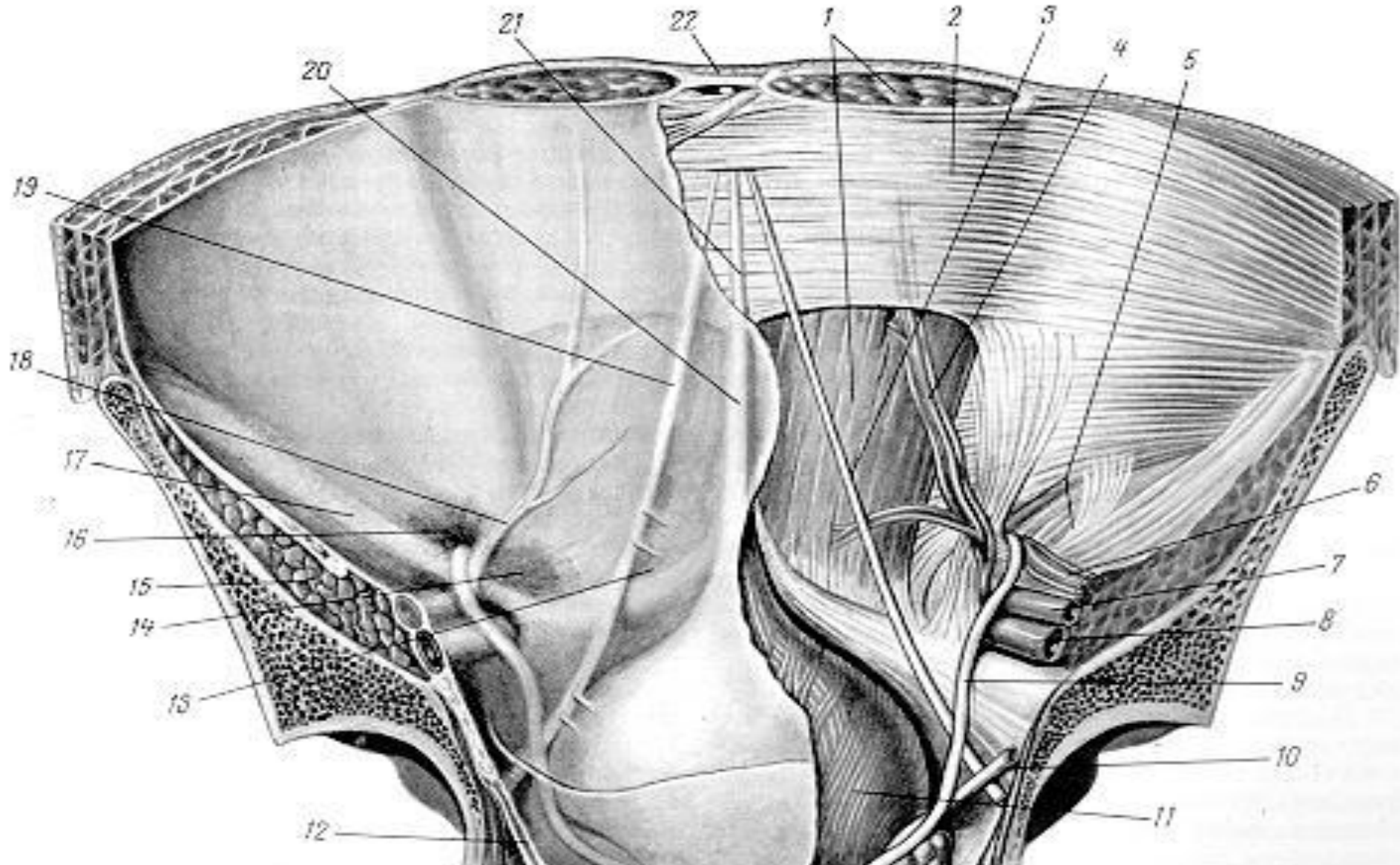
Inguinal



Anatomy of Hernia Sac



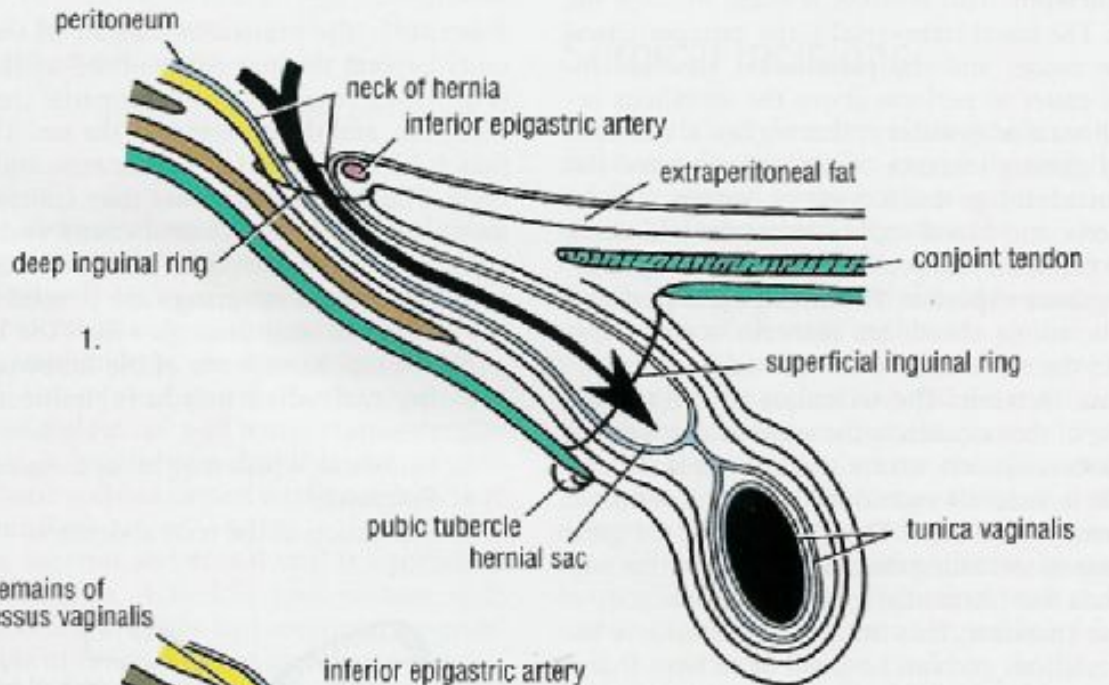
Anatomy of abdominal wall



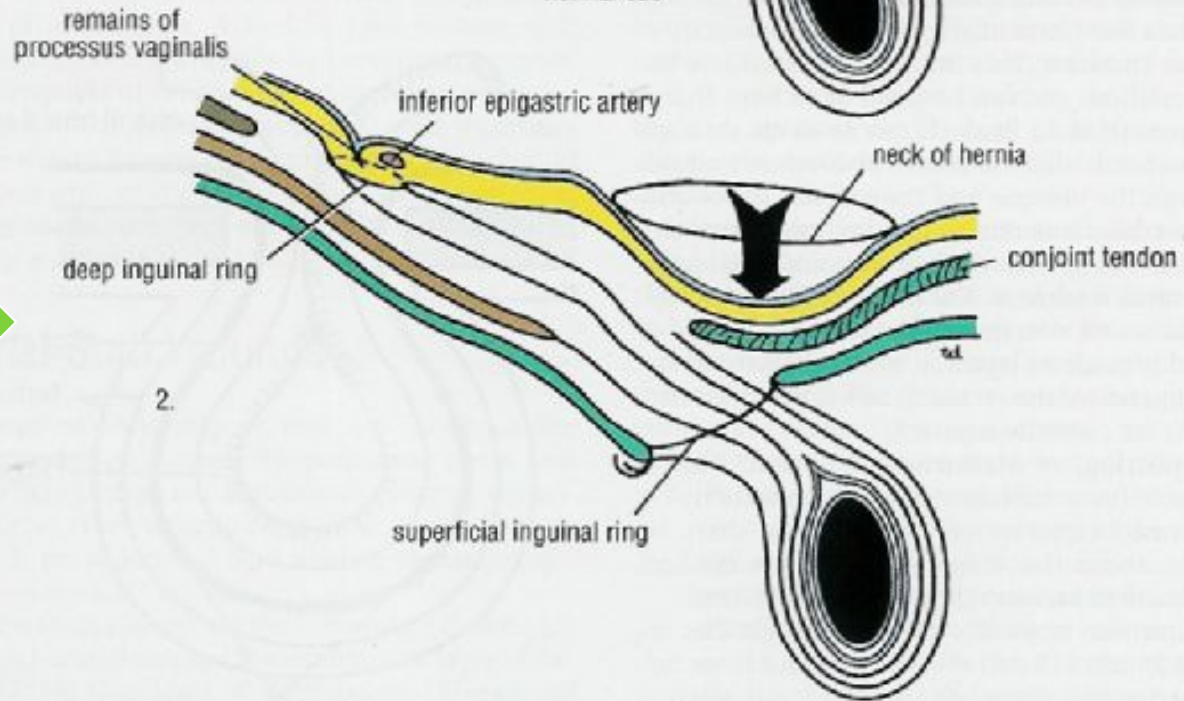
Direct Inguinal Hernia



Indirect
Hernia



Direct
Hernia



Hernia	Method of hernioplasty
Nyhus I	Hernioplasty of anterior wall of inguinal canal
Nyhus II	“Tension Free” plasty – Lichtenstein, Rives, Nyhus, TEP, TAPP (Corbitt), PHS
Nyhus IIIb	“Tension Free” plasty – Rives, Nyhus, TEP, TAPP (Corbitt),
Nyhus III	“Tension Free” plasty – Rives, Nyhus, TEP; for bilateral hernias - TAPP (Corbitt), Rives-Stoppa
Nyhus IV	Nyhus, TEP, TAPP

Umbilical

Incidence

- Reported ~10%
- several times greater in Black children
- more common in premature children all races
- Most close spontaneously by age 2 or 3
- Acquired rather than congenital in adults
- Female to male ratio 3:1



Epigastric

- **Clinical**

- Often asymptomatic, incidental finding
- If symptomatic, vague abdominal pain above the umbilicus exacerbated by standing or coughing; relieved in supine position
- Severe pain secondary to incarceration/strangulation of preperitoneal fat (often no peritoneal sac) or omentum
- Exam: palpate small, soft, reducible mass superior to the umbilicus
- *RARE* to have strangulated bowel

- **Tx**

- Excise fat and sac, close primarily

Laparoscopic Ventral Hernia

