



Learning objectives

- i To appreciate that hernias can strangulate ,and then become surgical emergencies
- i To know that femoral hernias are especially susceptible to strangulation
- i To understand the anatomy of the common hernias
- i To know the common surgical approaches to hernias



Hernia

It is protrusion of viscus or part of viscus through an abnormal opening in the wall of its containing cavity

Hernia

§ 1-External ; inguinal, femoral ,umbilical ,incisional ,epigastric spigelian , obturator ,gluteal,&diverication of recti.

§ 2-Internal; hiatal hernia

Causes

- I 1-weakness ;smoking ,obesity ,&old age
- I 2-increase intra-abdominal pressure ; cough ,straining ,pregnancy,ascitis &malignancy.

Composition of hernia

- I sac ; usually parietal peritoneum
- I covering ; wall layers covering the sac
- I content; omentum , small&large bowel , ovary , bladder

classification of hernia

- n 1-reducible ;content can be reduced inside the abdomen
- n 2-irreducible ;content cannot be reduced (but no complication)
- n 3-obstructed ; it is irreducible plus obstruction of bowel
- n 4-strangulated ;obstructed bowel plus obstructed blood supply
- n 5-inflammed ; the content of the sac become inflamed

inguinal hernia anatomy

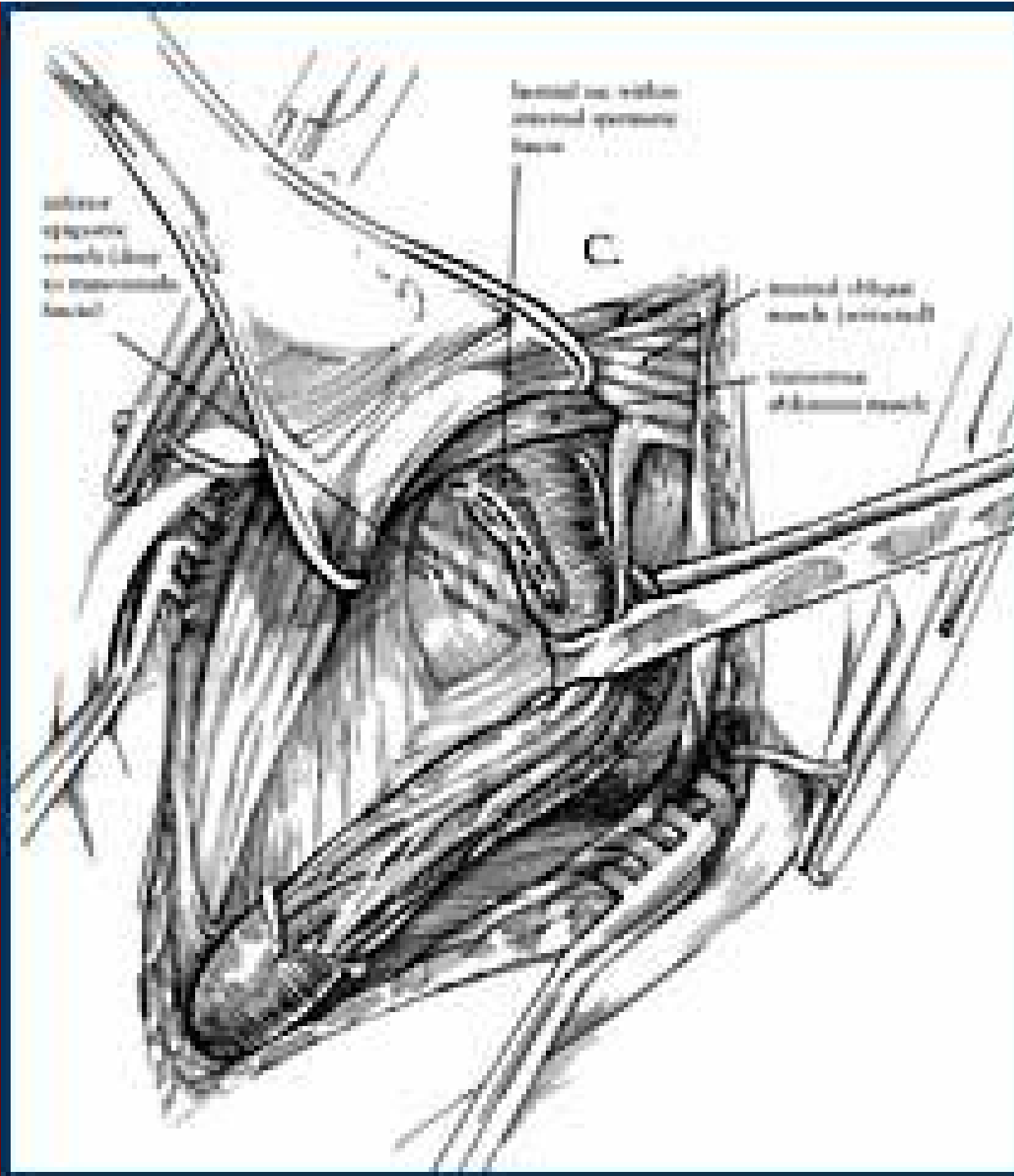
- n superficial inguinal ring ;it is an opening in the external oblique aponeurosis ,1.25 cm above pubic tubercle
- n pubic tubercle ;is the upper most lateral most part of pubic bone
- n deep inguinal ring ; it is 1.5 cm above mid inguinal point it is an opening in the transversalis fascia

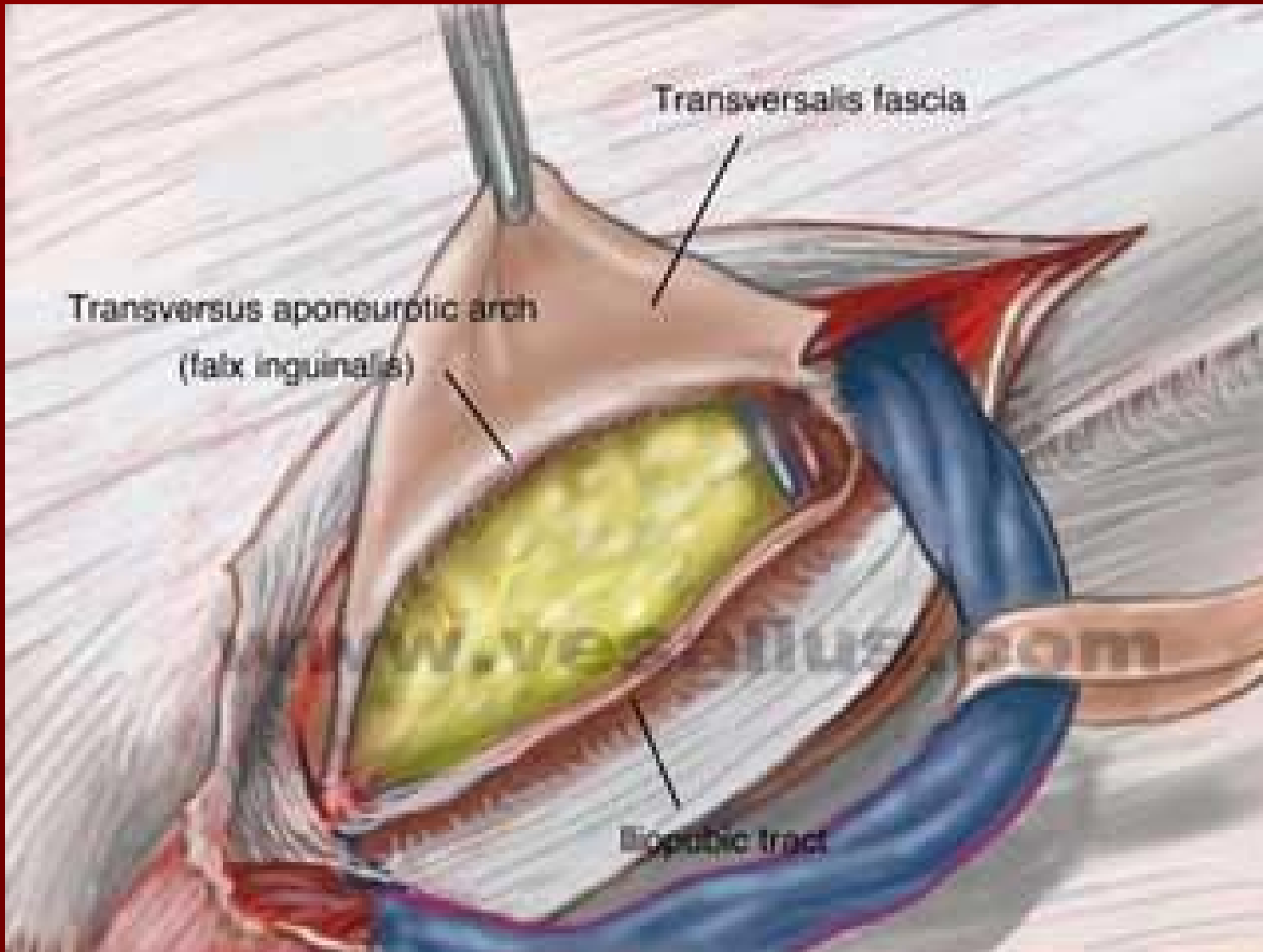
inguinal hernia anatomy

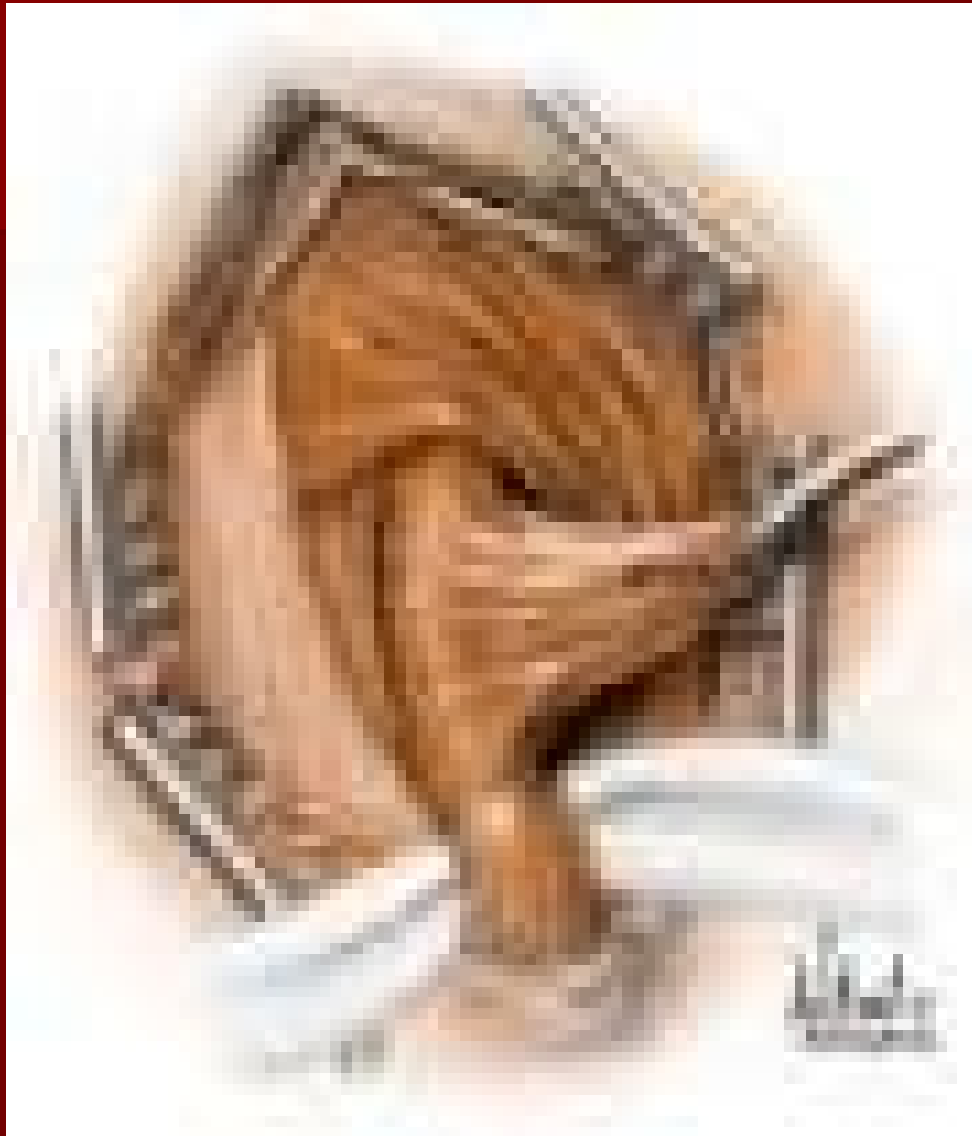
- n inguinal canal; it is about 4cm in length ,directed downward &medially for the passage of spermatic cord ,ilioinguinal N ,genital branch of genitofemoral N ,,
- n in female the round ligament replace spermatic cord

inguinal hernia anatomy

- n anteriorly ; external oblique aponeurosis plus conjoined muscle laterally
- n posteriorly ; fascia transversalis and conjoined tendon
- n superiorly ; conjoined muscle (internal oblique & transversalis)
- n inferiorly ; inguinal ligament







indirect inguinal hernia

- u it is the most common of all form of hernia



clinical feature symptom

- occur at all age
- male > female
- pain at groin ,at walking & exercise
- swelling on cough ,standing in the groin





sign

- On standing ,ask patient to cough ,you will see expansible impulse ,and you can feel it
- In supine position ,you can confirm the reducibility of hernia
- Also we can feel the content

Differential diagnosis

- u Vaginal hydrocoele
- u Encysted hydrocoel
- u Spermatocele
- u Femoral hernia

In female

- u Hydrocoel of canal of nuck
- u Femoral hernia

Treatment

The treatment of choice is operation

The principles of operation are;

- I 1-infant ,children & young adults
- I herniotomy ; this mean excision of the sac ,after reduction of content and transfixation of the neck .





adults

- I 1-herniotomy ;
- I 2-herniorrhaphy ; this achieved by
 - **A-repair of stretched internal inguinal ring and transversalis fascia**



B-reinforcement of post wall of inguinal canal

- i 1-Basini repair
- i Shouldice repair
- i Mesh repair by Lichtenstein tension free hernioplasty
- i Plug & mesh repair
- i Laparoscopic herniorrhaphy



