

THE FRONT OF THE THIGH

Femoral triangle(Scarpa's triangle)

Is a *triangular* depressed area located *in the upper part of the medial aspect of the thigh* immediately *below the inguinal ligament*.

Boundaries

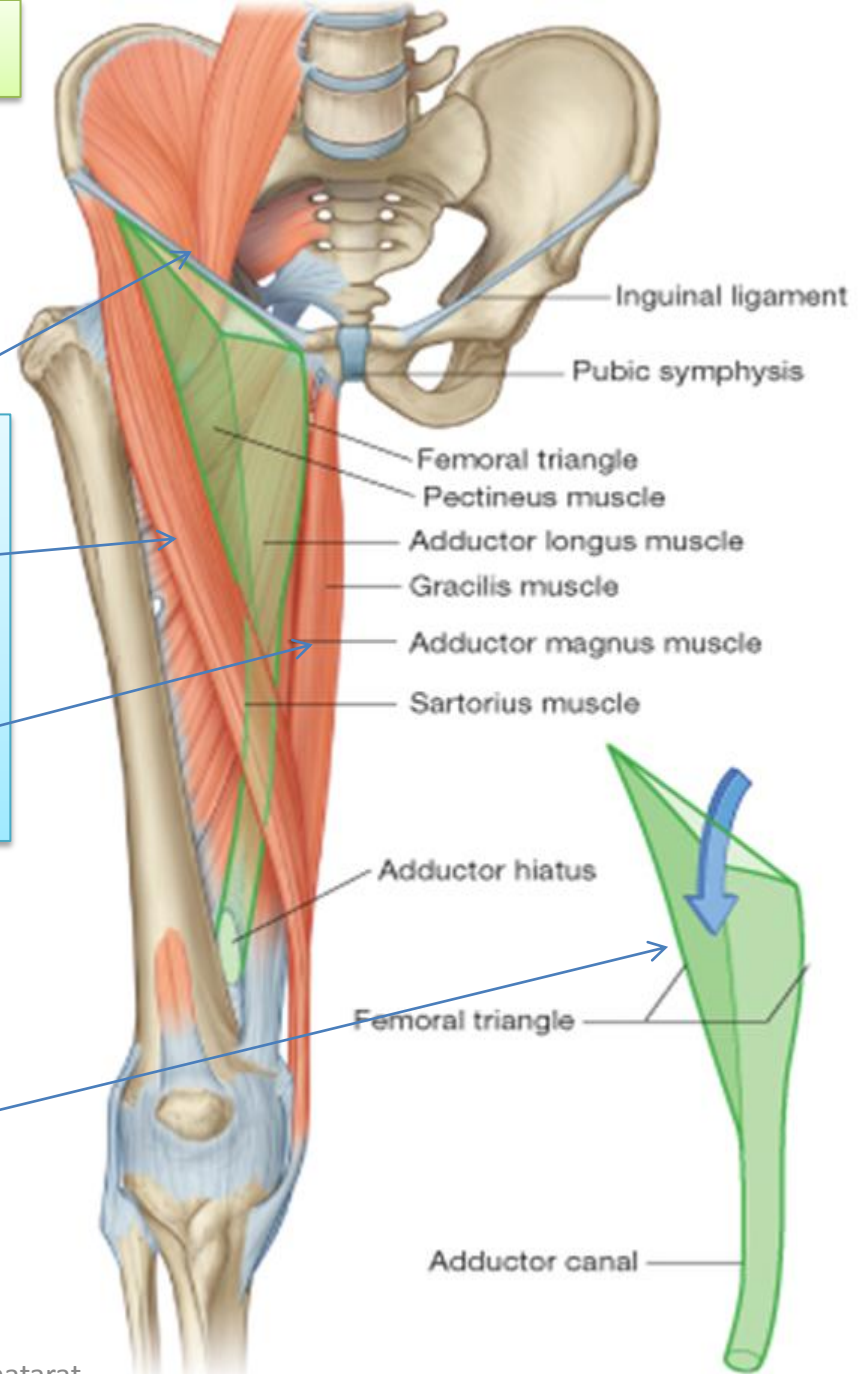
Superiorly:The *inguinal ligament*
(the base of the triangle)

Laterally:The *medial border of sartorius muscle*

Medially:The medial border of *adductor longus muscle*

The apex: directed downwards and is formed by the meeting point of Sartorius and adductor longus muscles

Floor: gutter shaped from lateral to medial is made by
The iliopsoas muscle
The pectineus muscle
The adductor longus



Roof :

Formed by

1- skin

2- superficial fascia which contains:

A-superficial inguinal lymph nodes

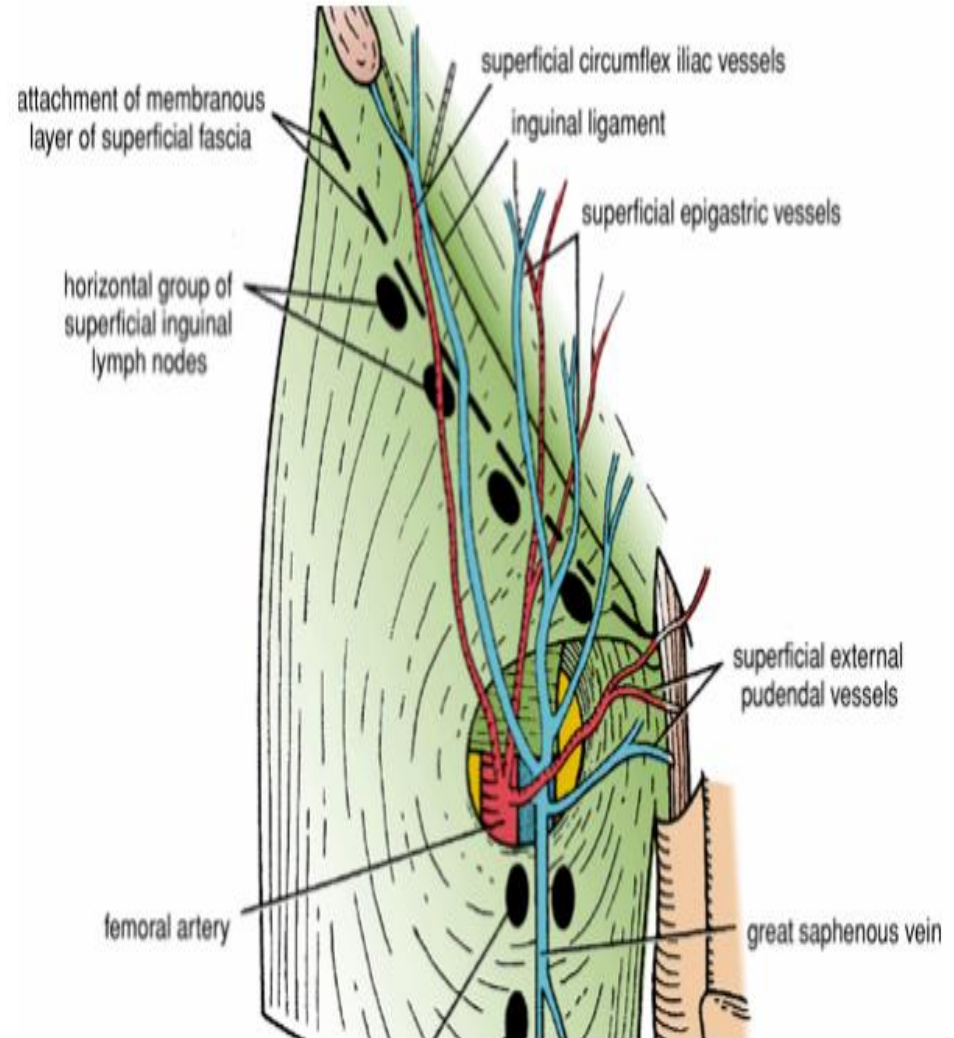
B-femoral branch of the genitofemoral nerve

C- branches of ilioinguinal nerve

D-superficial branches of the femoral artery and corresponding veins

E- terminal part of the great saphenous vein

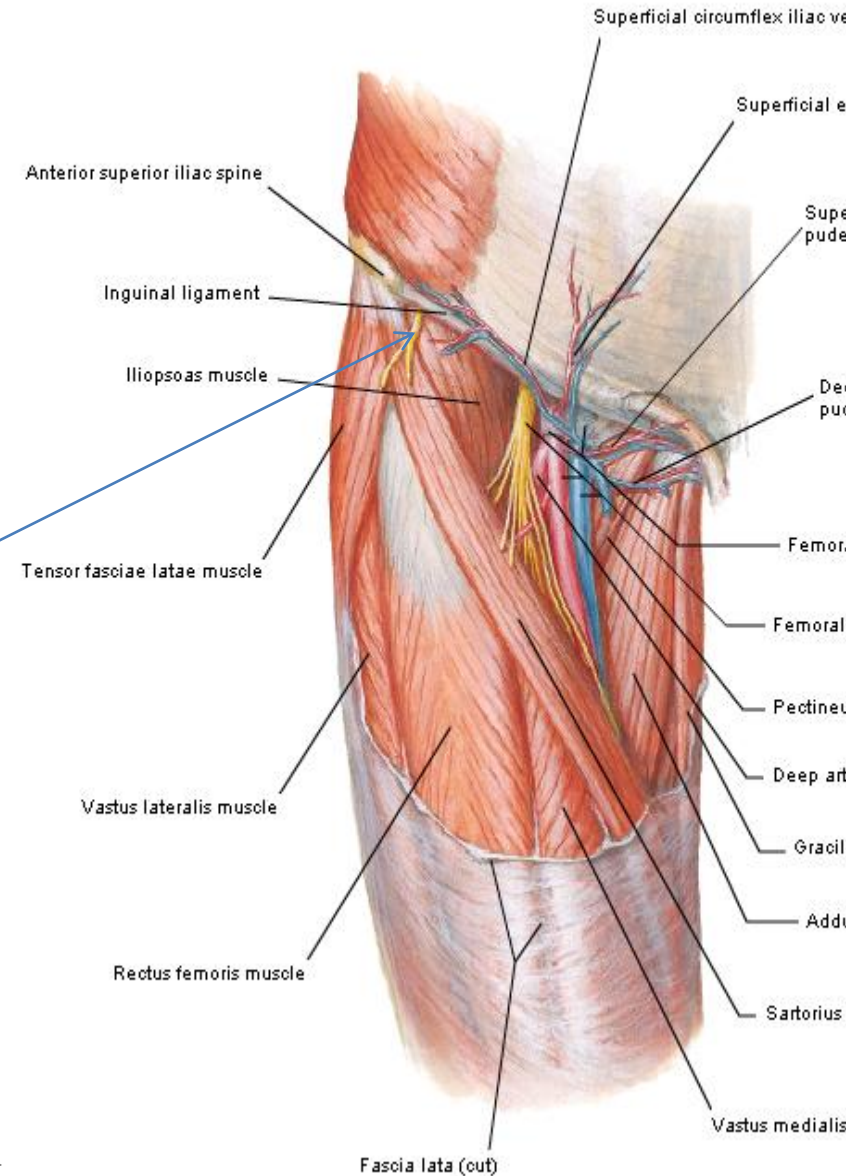
3- deep fascia containing the Saphenous opening

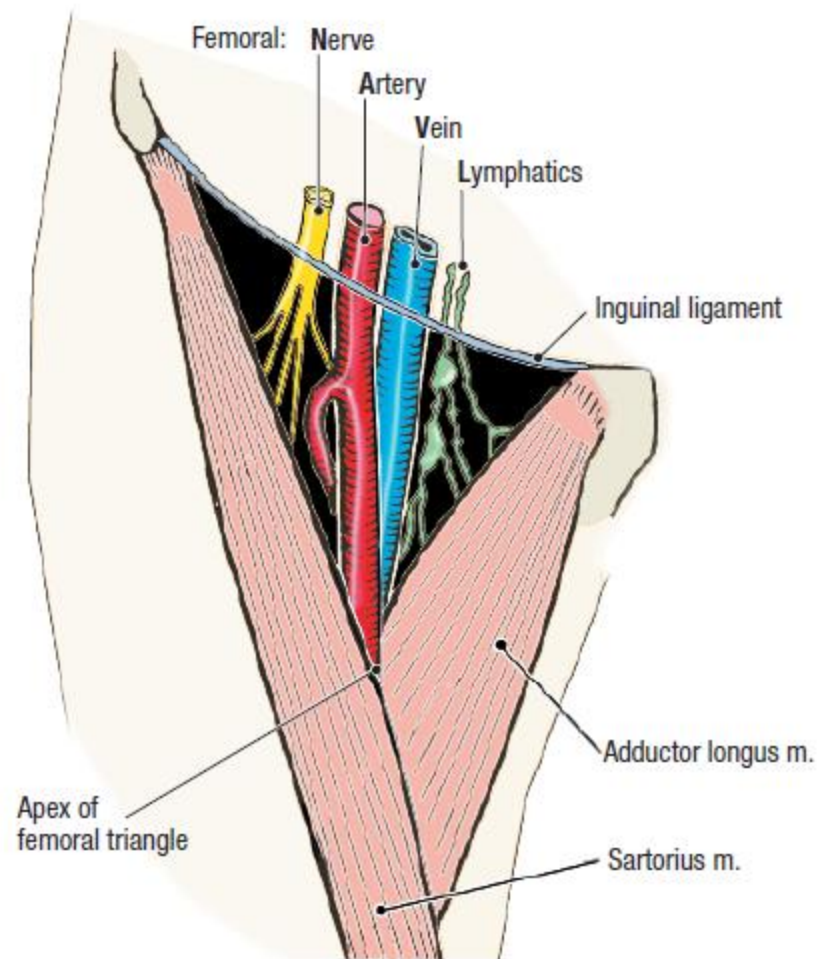


Contents of the femoral triangle

Arteries and Nerves of Thigh Superficial Anterior View

- 1- Terminal part of the femoral nerve and its branches.***
- 2- The femoral sheath***
- 3- The femoral artery and its branches.***
- 4- The femoral vein and its tributaries.***
- 5- Deep inguinal lymph nodes***
- 6- femoral branch of genitofemoral nerve***
- 7- lateral cutaneous nerve of the thigh***





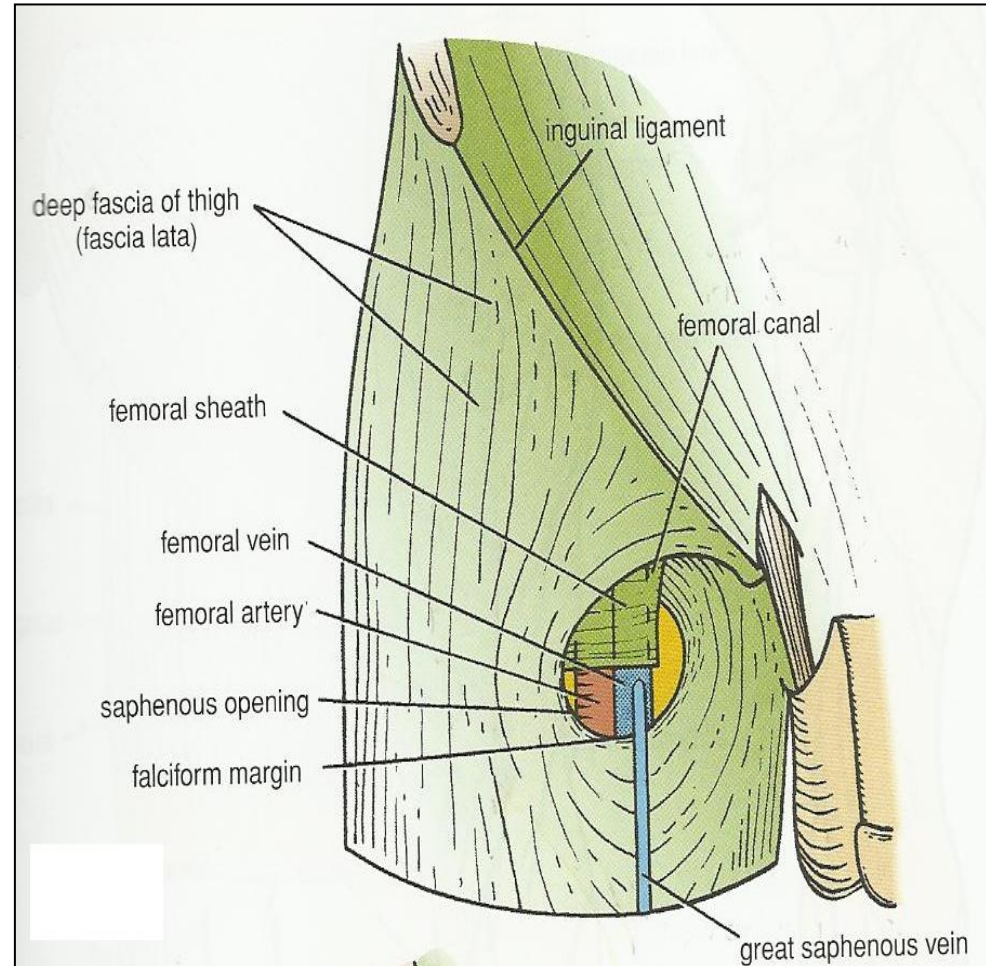
The femoral sheath

Is a funnel-shaped sleeve of fascia surrounded the femoral artery , vein and the associated lymphatic vessels in the *femoral triangle* for 2.5 cm below the inguinal ligament.

➤ The femoral sheath is formed by a downwards extension of the abdominal fascia.

Anterior wall: fascia transversalis
Posterior wall: fascia iliaca

➤ Two Anterio-posterior septa divide the sheath into 3 compartments:



1-Lateral compartment (arterial)

occupied by the *femoral artery and femoral branch of the genitofemoral nerve*

2-Intermediate compartment (venous)

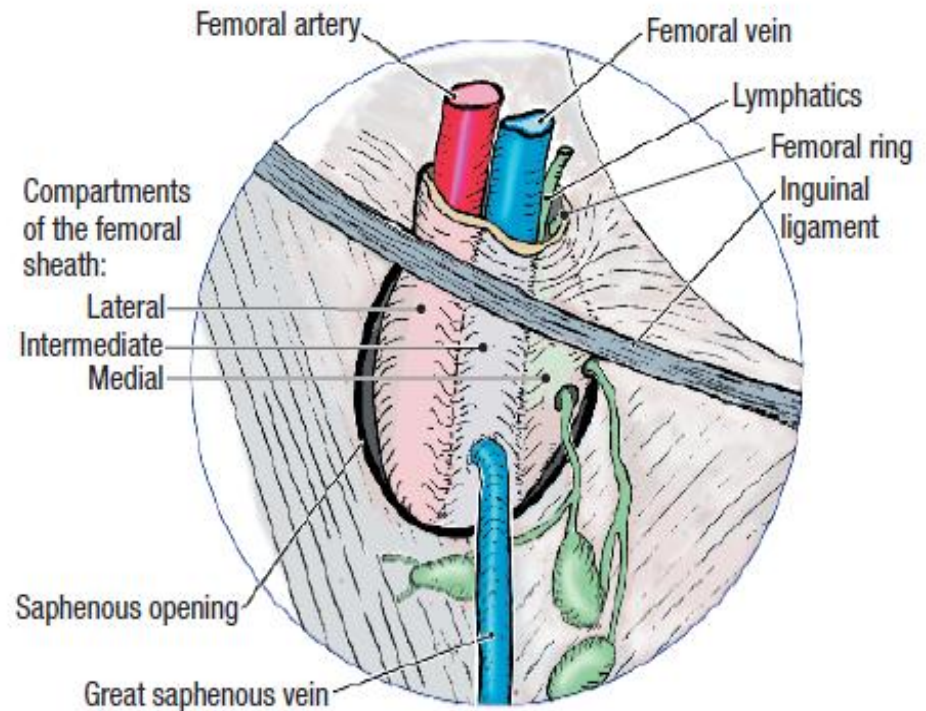
occupied by the *femoral vein*

3-Medial compartment (lymphatic)

occupied by the *lymph vessels*

(also Called

f e m o r a l c a n a l



NAVEL ?

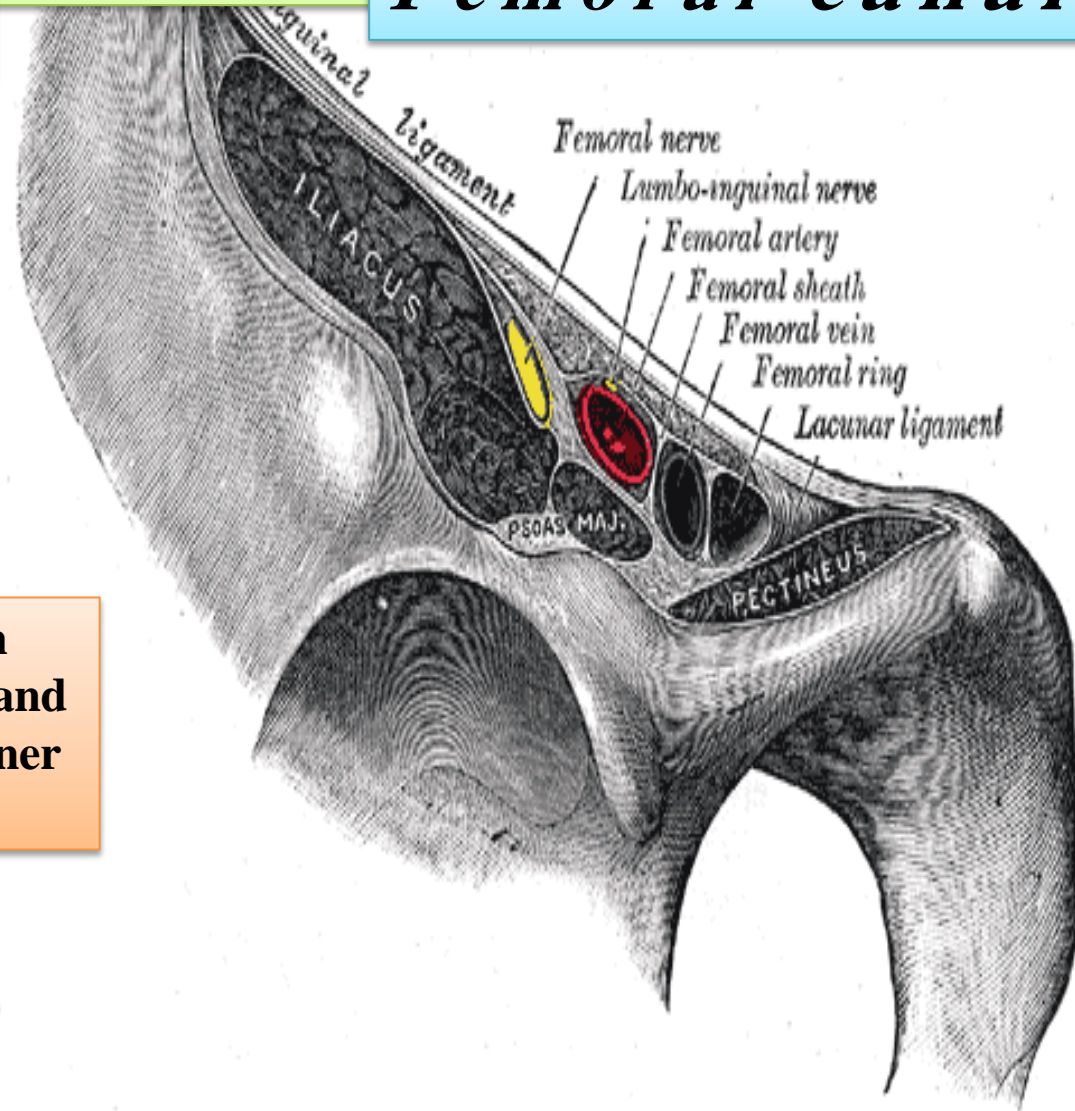
➤ Is the small **medial compartment** for the **lymph** vessels. **1.3 cm** In length.
just admits the tip of the little finger.

➤ Its upper opening is called the **femoral ring**.

➤ The femoral septum (is a condensation of extraperitoneal tissue), closes the ring.

Note: the femoral ring is wider in femals because of their wider pelvis and therefore, femoral hernia is commoner in femals than in males

Femoral canal



**The canal
contains:**

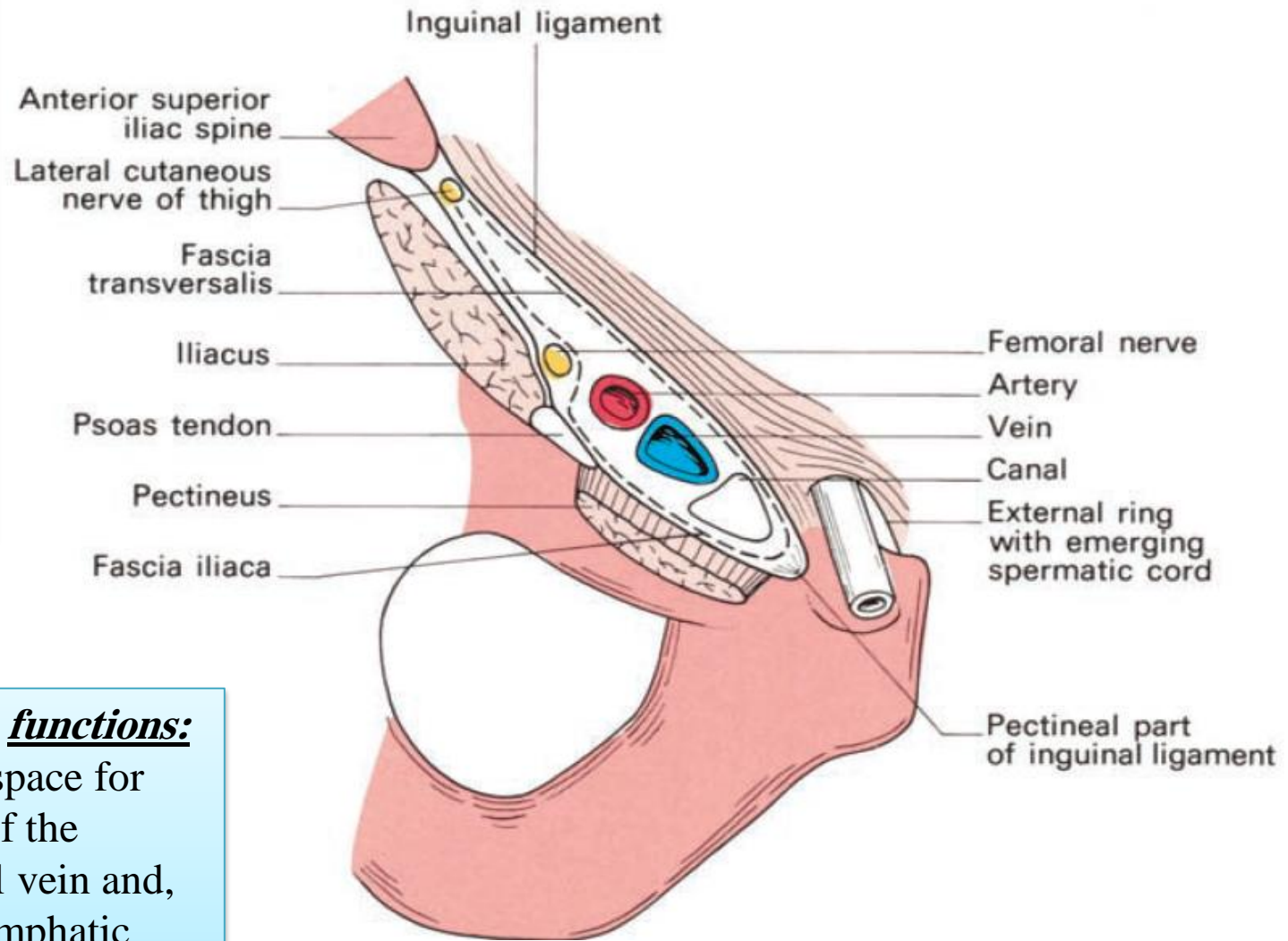
1-a plug of fat

**2-a constant lymph
node—the *node of
the femoral canal
or Cloquet's gland.***

**3-all the efferent
lymph vessels from
the deep inguinal
lymph nodes**

The canal has two **functions**:

first, as a dead space for
expansion of the
distended femoral vein and,
second, as a lymphatic
pathway from the
lower limb to the external iliac
nodes



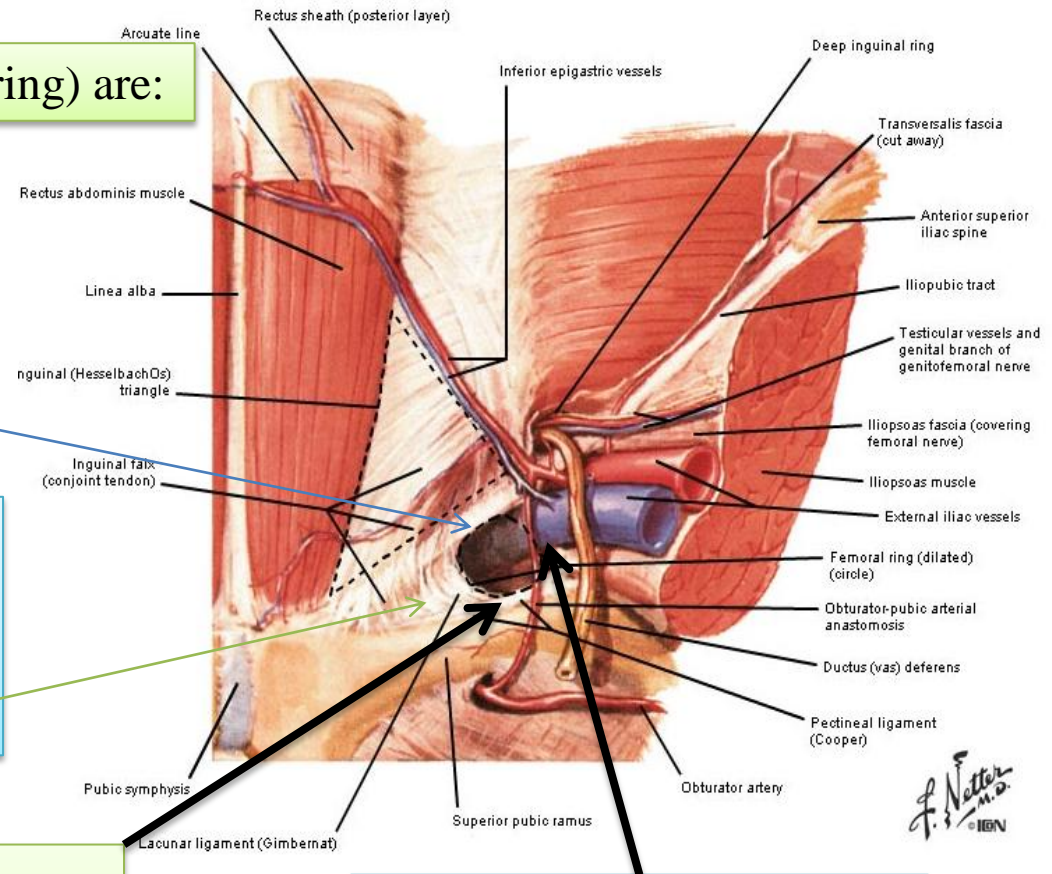
Inguinal Region Dissection - Posterior (Internal) View

The boundaries of the femoral canal (ring) are:

Anteriorly: the inguinal ligament

Medially: the sharp free edge of the pectineal part of the inguinal ligament, termed the *lacunar ligament* (*Gimbernat's ligament*)

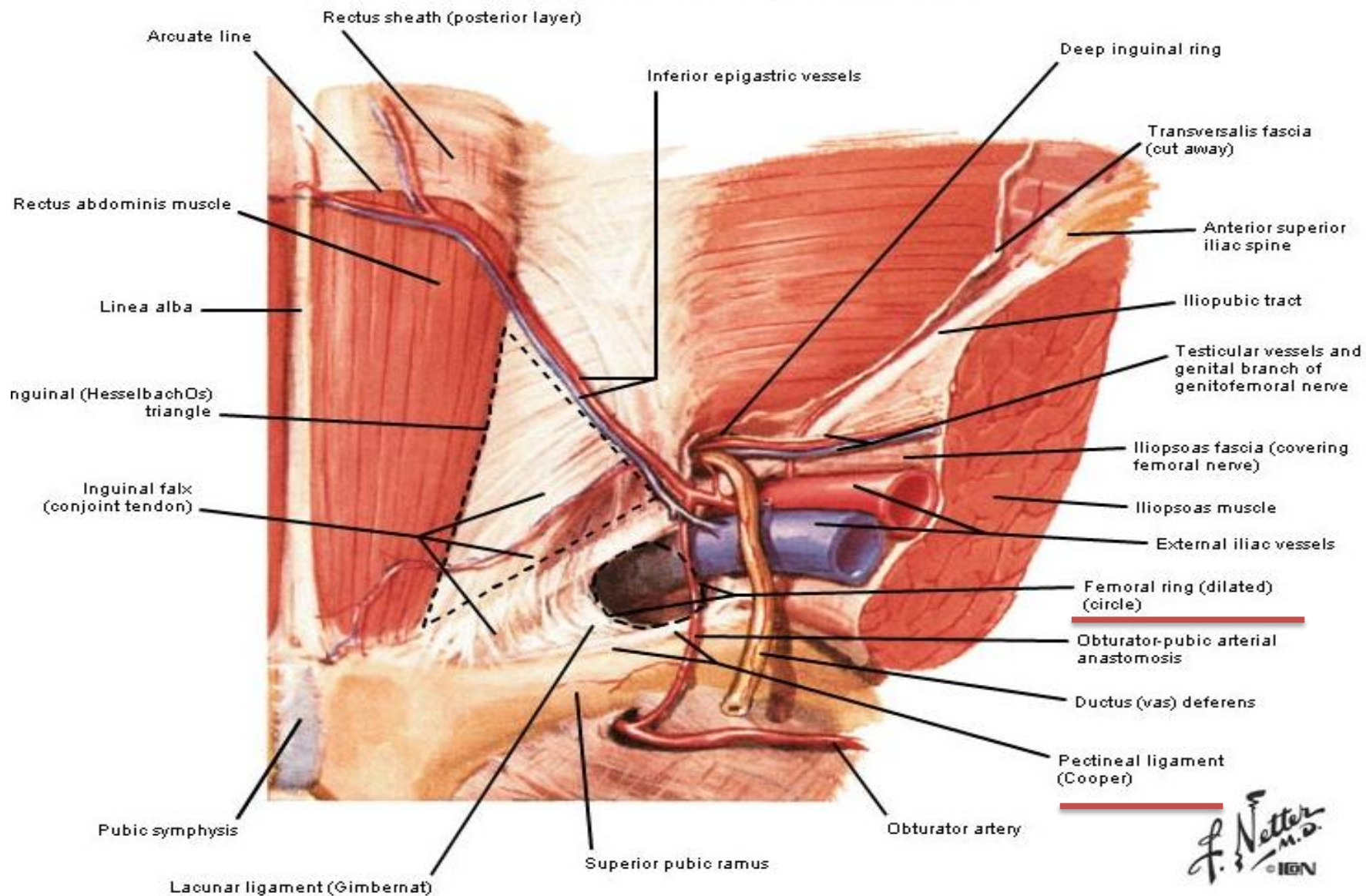
Posteriorly — the pectineal ligament (of Astley Cooper), which is the thickened periosteum along the pectineal border of the superior pubic ramus and which continues medially with the pectineal part of the inguinal ligament.



laterally—the femoral vein

Inguinal Region

Dissection - Posterior (Internal) View

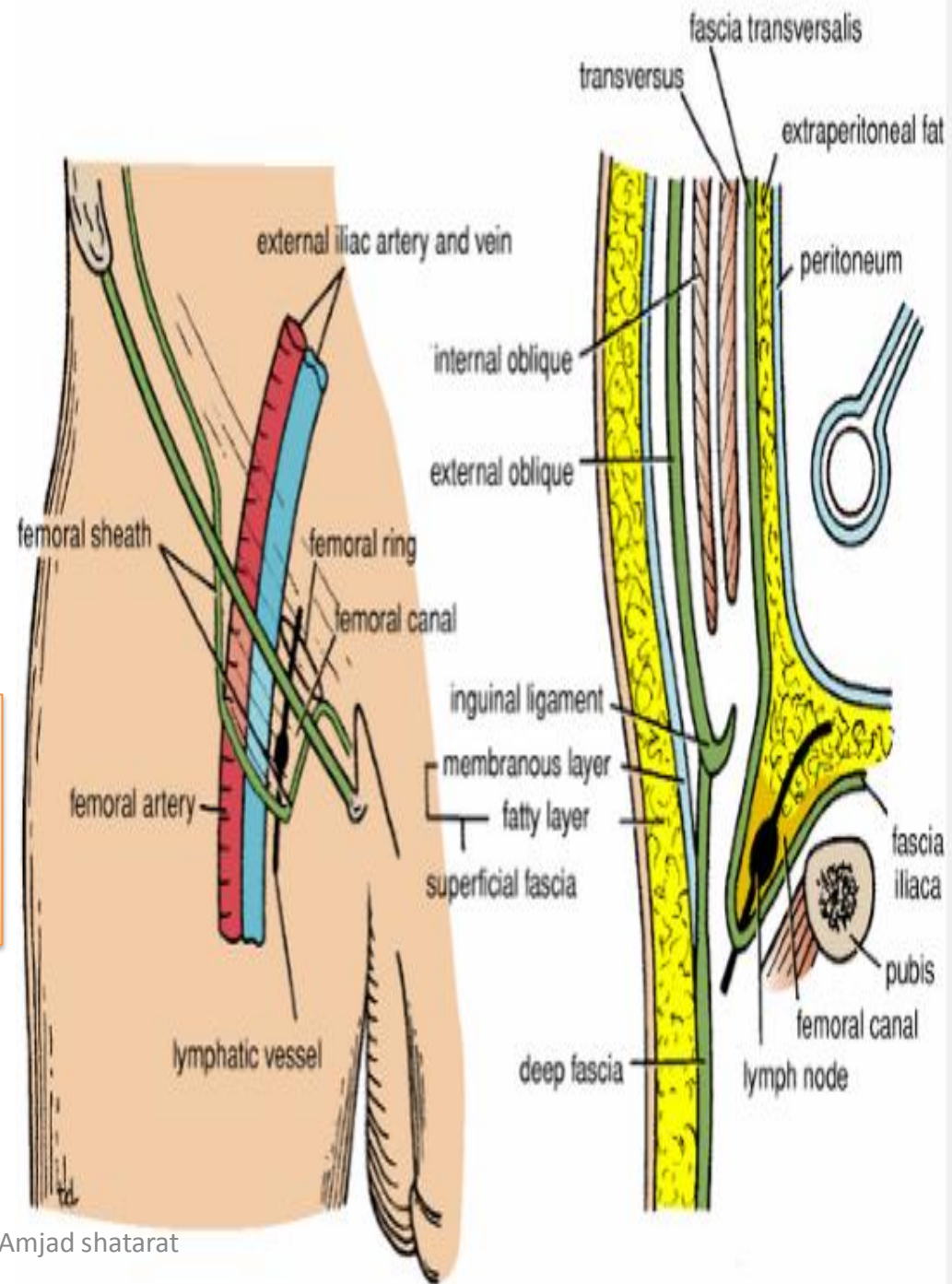


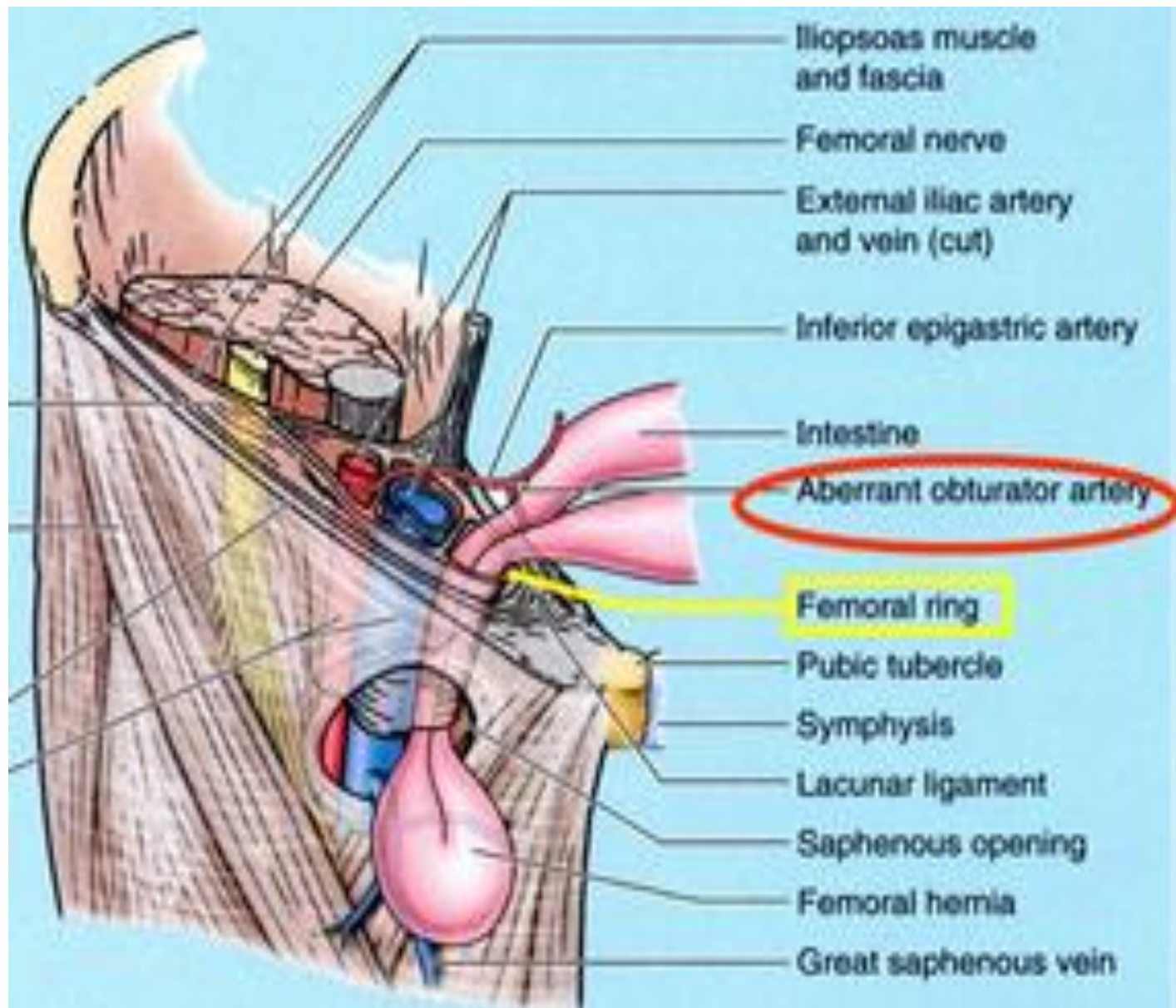
lacunar ligament (*Gimbernat's ligament*)

- The part of the femoral sheath that forms the femoral canal is not adherent to the walls of the small lymph vessels; it is this site that forms a **potentially weak area in the abdomen.**

A protrusion of peritoneum could be forced down the femoral canal, pushing the femoral septum. Such a condition is known **as a femoral hernia.**

➤ The lower end of the canal is normally **closed by the adherence of its medial wall to the tunica adventitia of the femoral vein.**





A protrusion of abdominal parietal peritoneum down through the femoral canal to form hernial sac

In femoral hernia

The neck of the hernial sac is located below and lateral to the pubic tubercle

While in the inguinal hernia

The neck of the hernial sac is located above and medial to the pubic tubercle

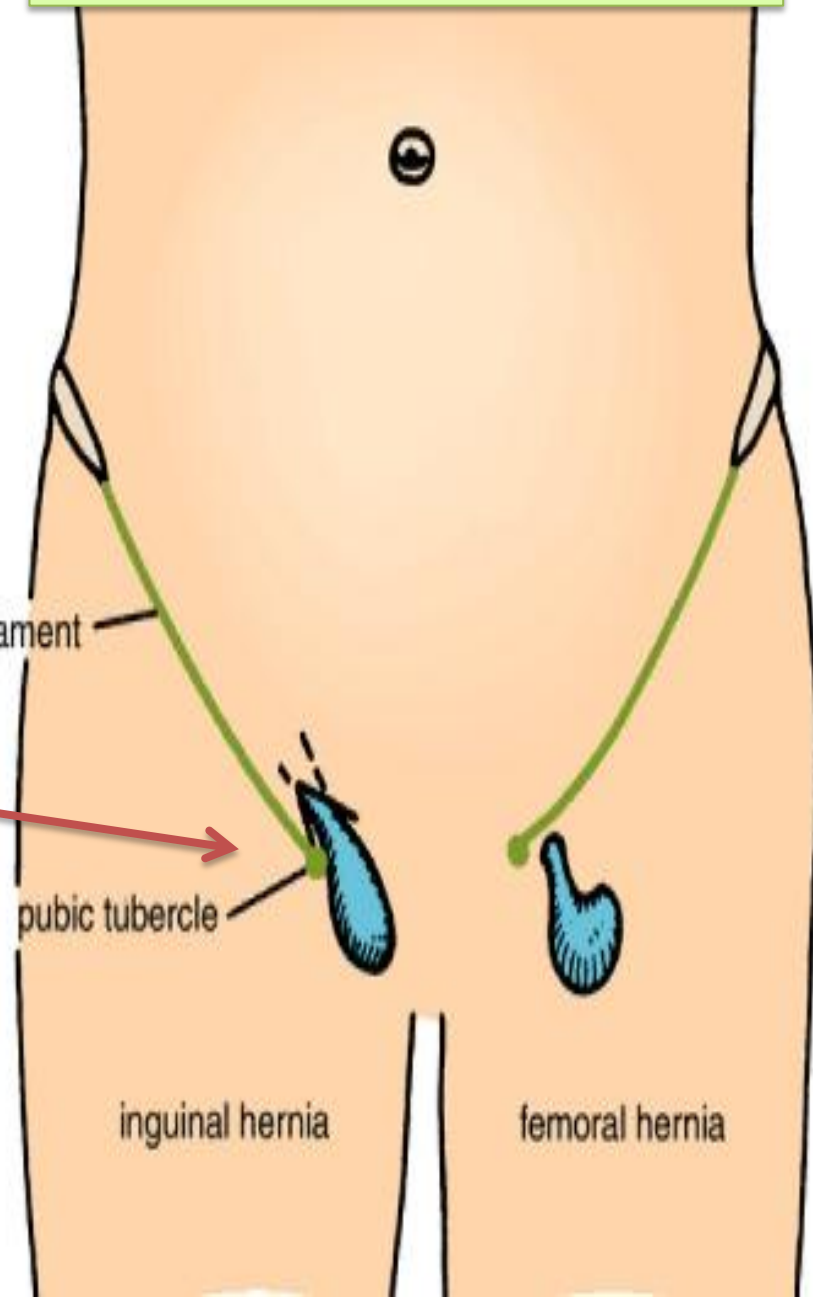
Femoral hernia

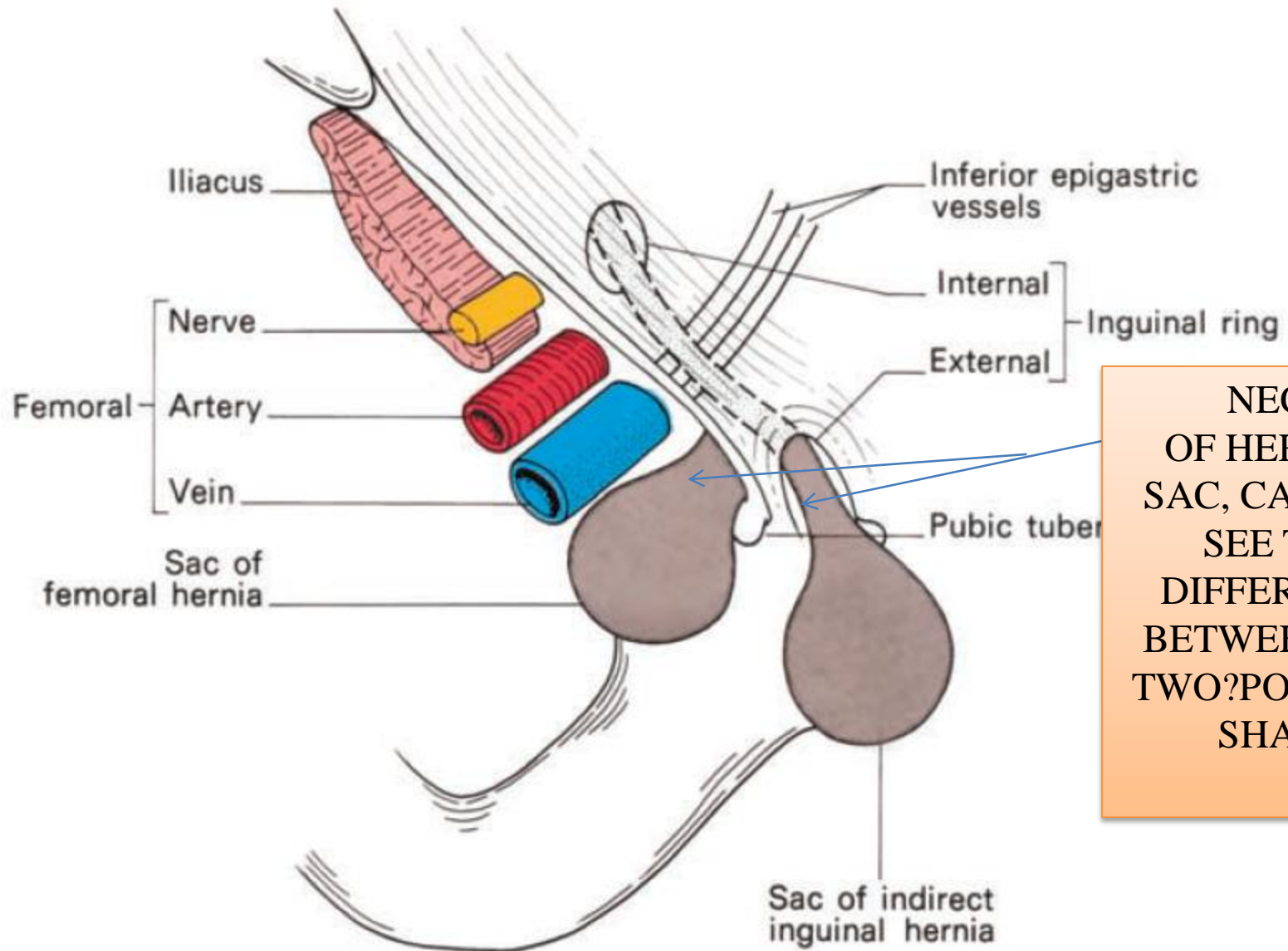
inguinal ligament

pubic tubercle

inguinal hernia

femoral hernia





NECK
OF HERNIAL
SAC, CAN YOU
SEE THE
DIFFERENCE
BETWEEN THE
TWO? POSITION,
SHAPE

Read only

As the hernia sac enlarges, it emerges through **the saphenous opening** then turns upwards along the pathway presented by the superficial epigastric and superficial circumflex iliac vessels so that it may come to project above the inguinal ligament.

Read only

There should not, however, be any difficulty in differentiating between an irreducible femoral and inguinal hernia; the neck of the former must always lie below and lateral to the pubic tubercle whereas the sac of the latter extends above and medial to this landmark

important

The neck of the femoral canal is narrow and bears a particular sharp medial border; for this reason, irreducibility and strangulation occur more commonly at this site than at any other. In order to enlarge the opening of the canal at operation on a strangulated case, this sharp edge of Gimbernat's lacunar ligament may require incision; **there is a slight risk of damage to the abnormal obturator artery** in this manoeuvre and it is safer to enlarge the opening by making several small nicks into the ligament. The safe alternative is to divide the inguinal ligament, which can then be repaired.

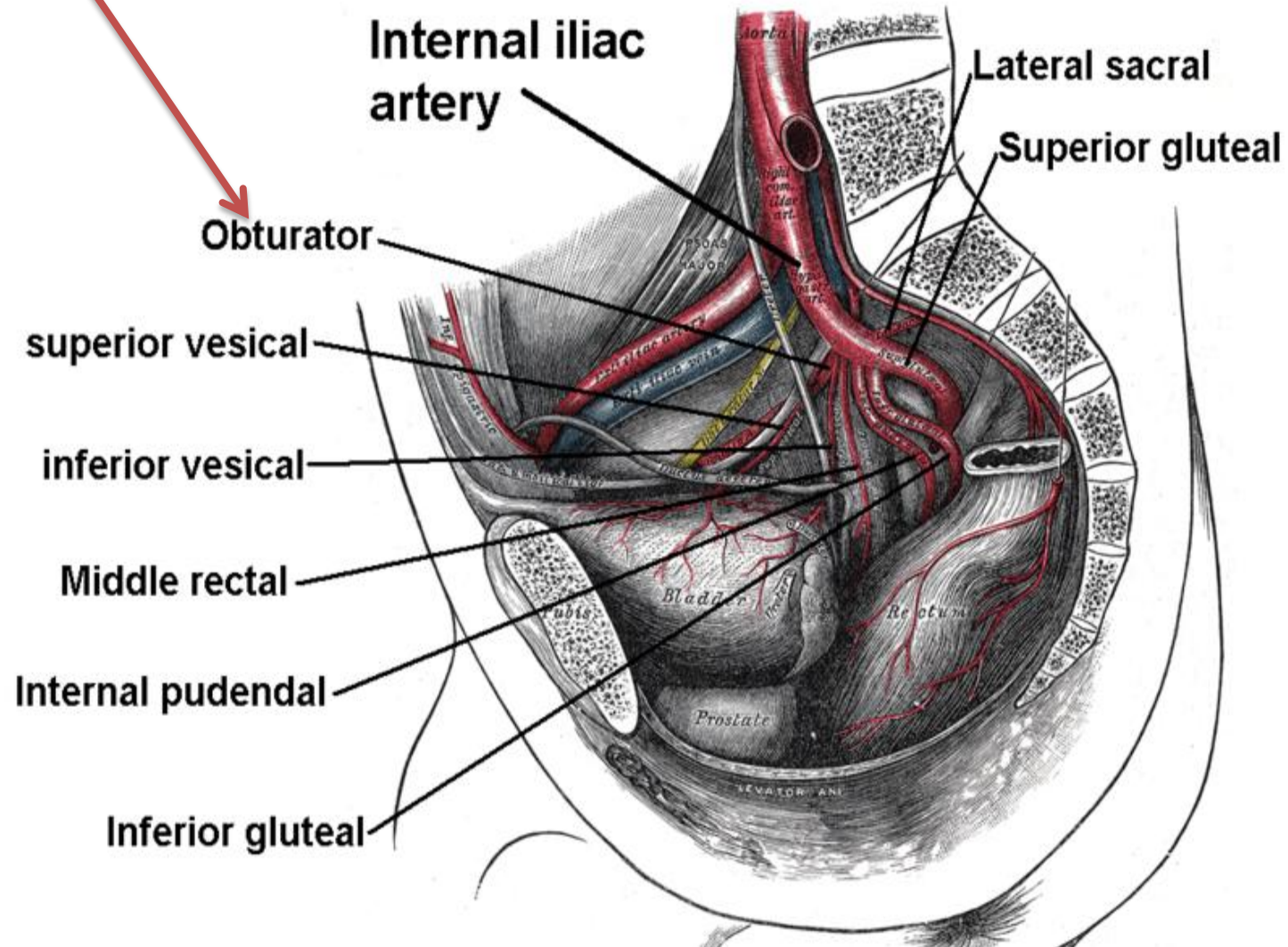
Note.

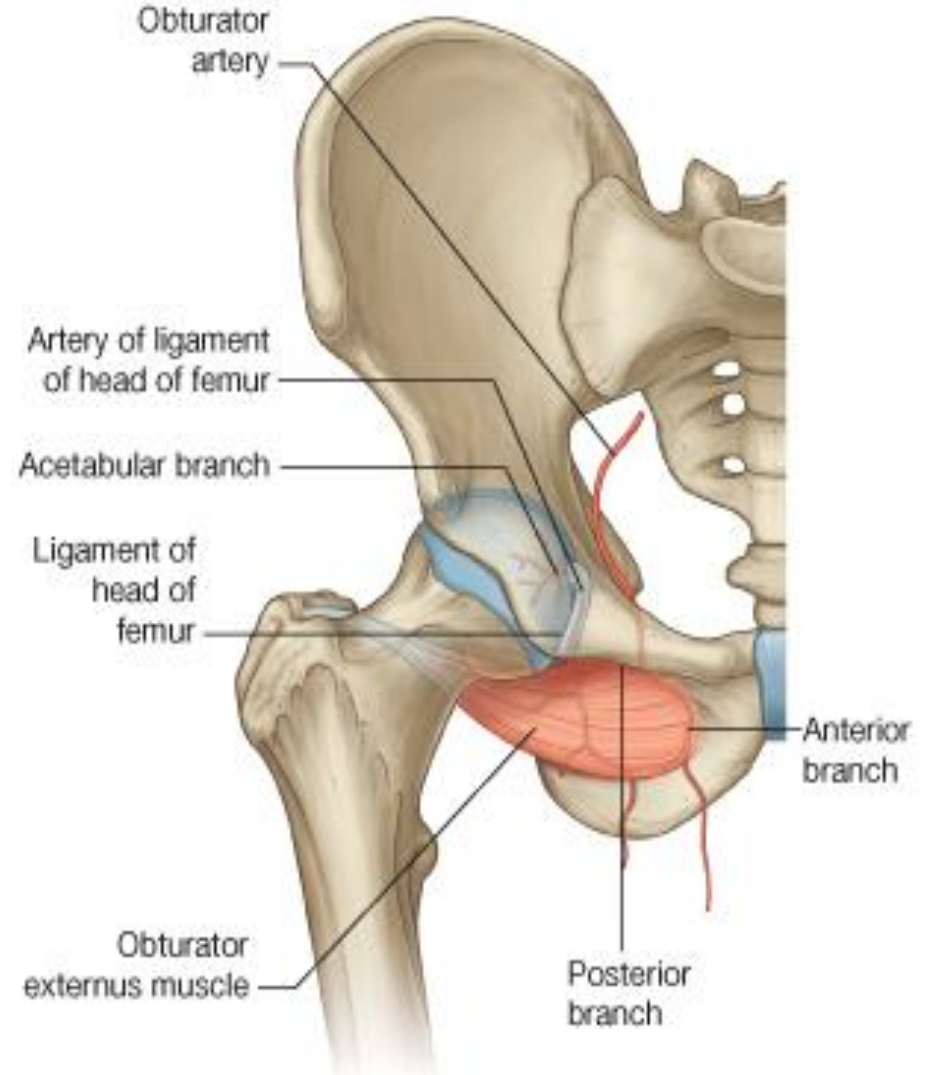
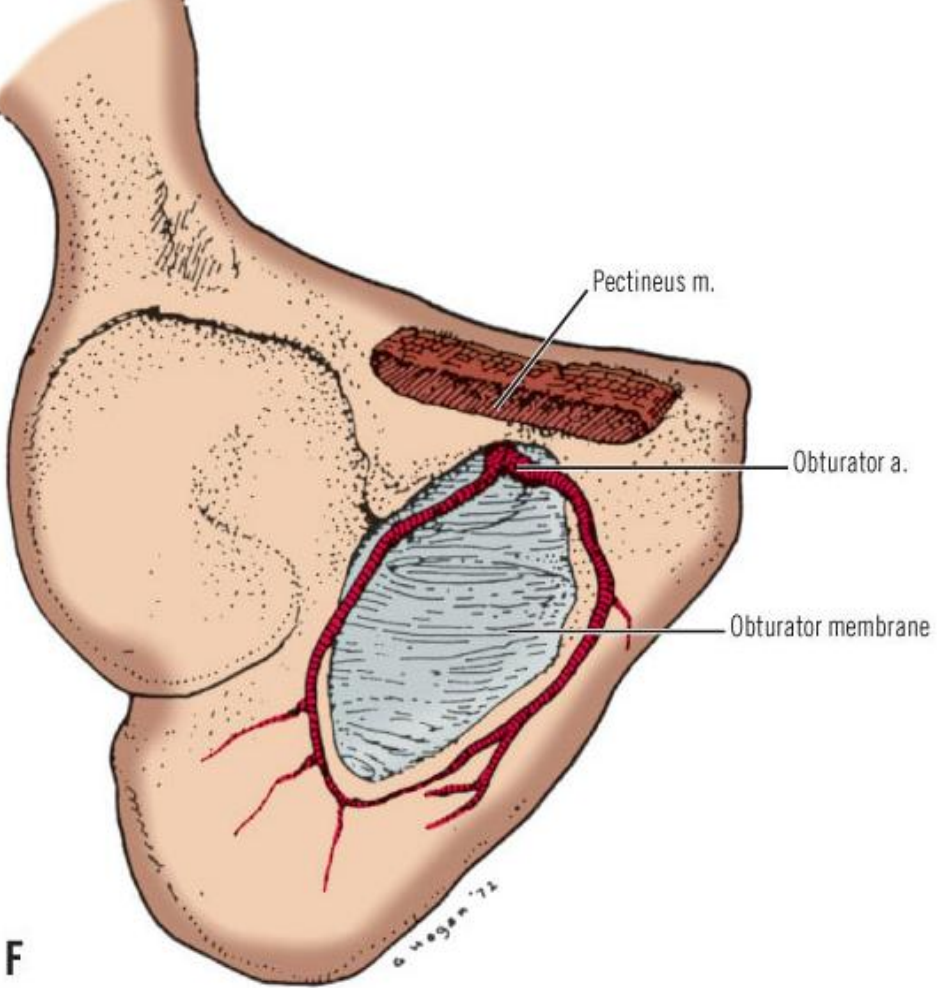
the obturator artery.

Obturator Artery

➤ The obturator artery is a branch of the internal iliac artery

➤ It passes forward on the lateral wall of the pelvis and accompanies the obturator nerve

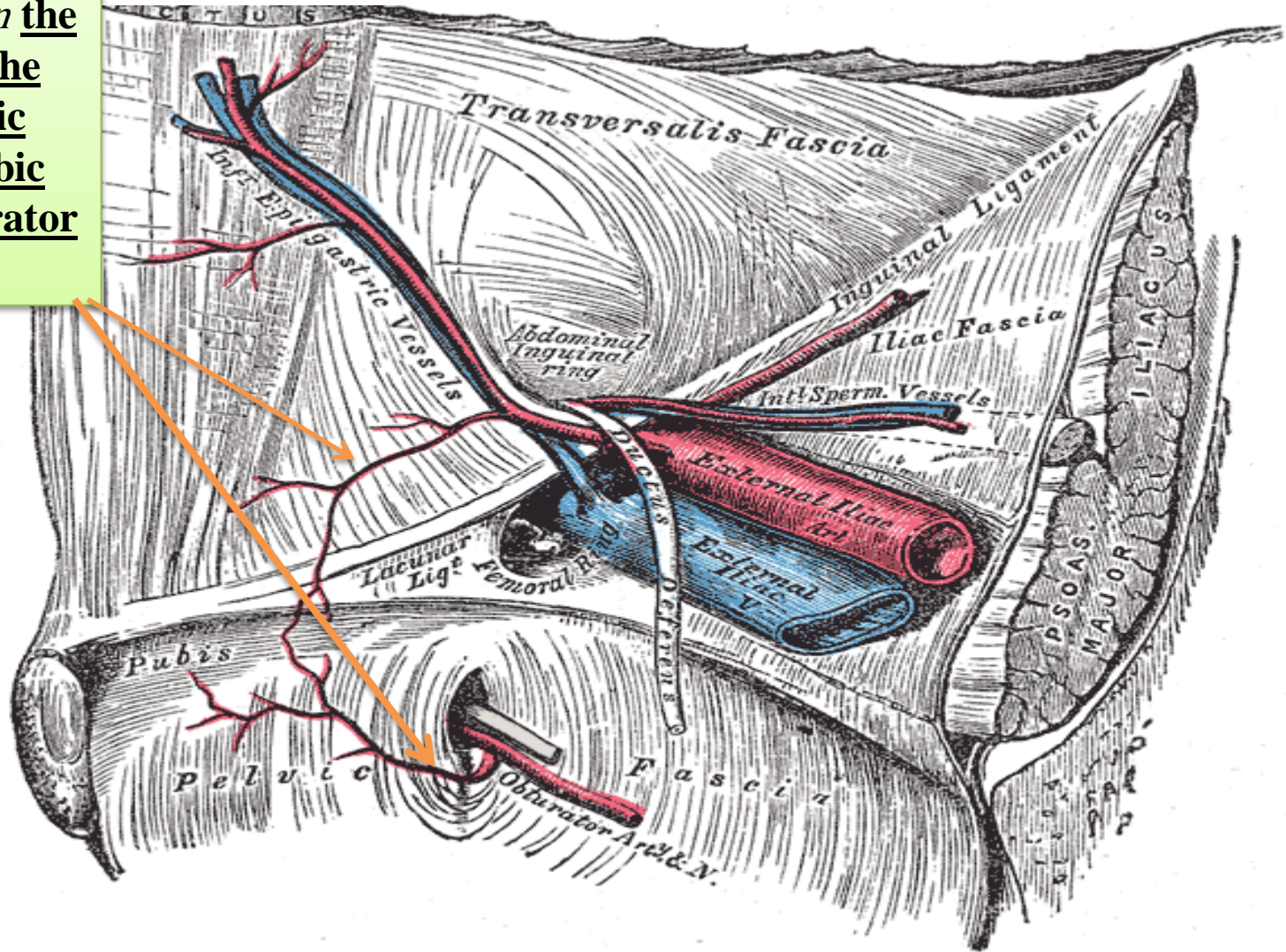




➤ It gives off muscular branches and an articular branch to the hip joint

Note.

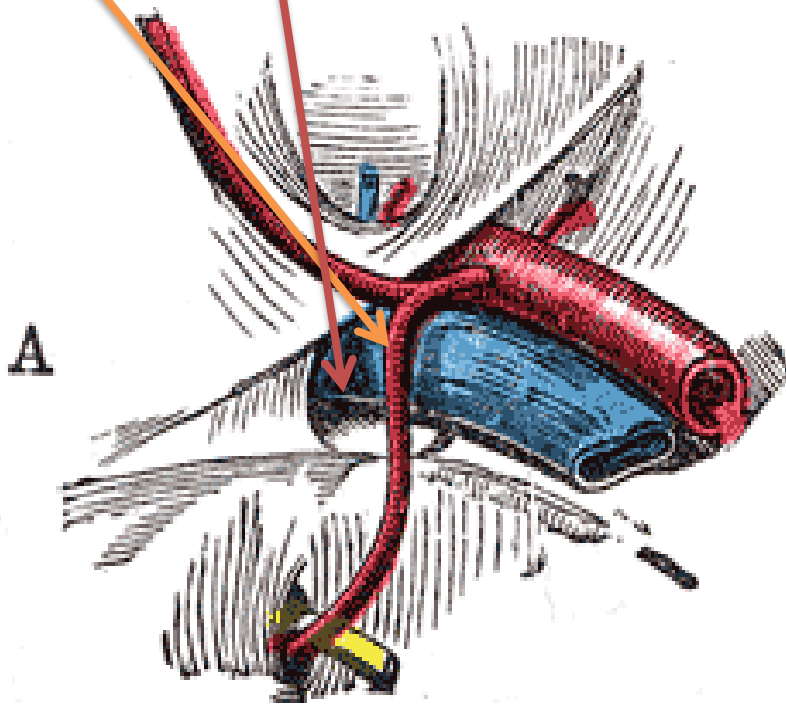
Normally there is an anastomosis between the pubic branch of the inferior epigastric artery and the pubic branch of the obturator artery.



A view from inside the abdomen

Occasionally
the obturator artery is entirely replaced by this branch from the
inferior epigastric—the *abnormal obturator artery*;

This aberrant vessel usually passes
laterally to the femoral canal and is out
of harm's way



rarely, it passes behind Gimbernat's ligament
and it is then in surgical danger.

