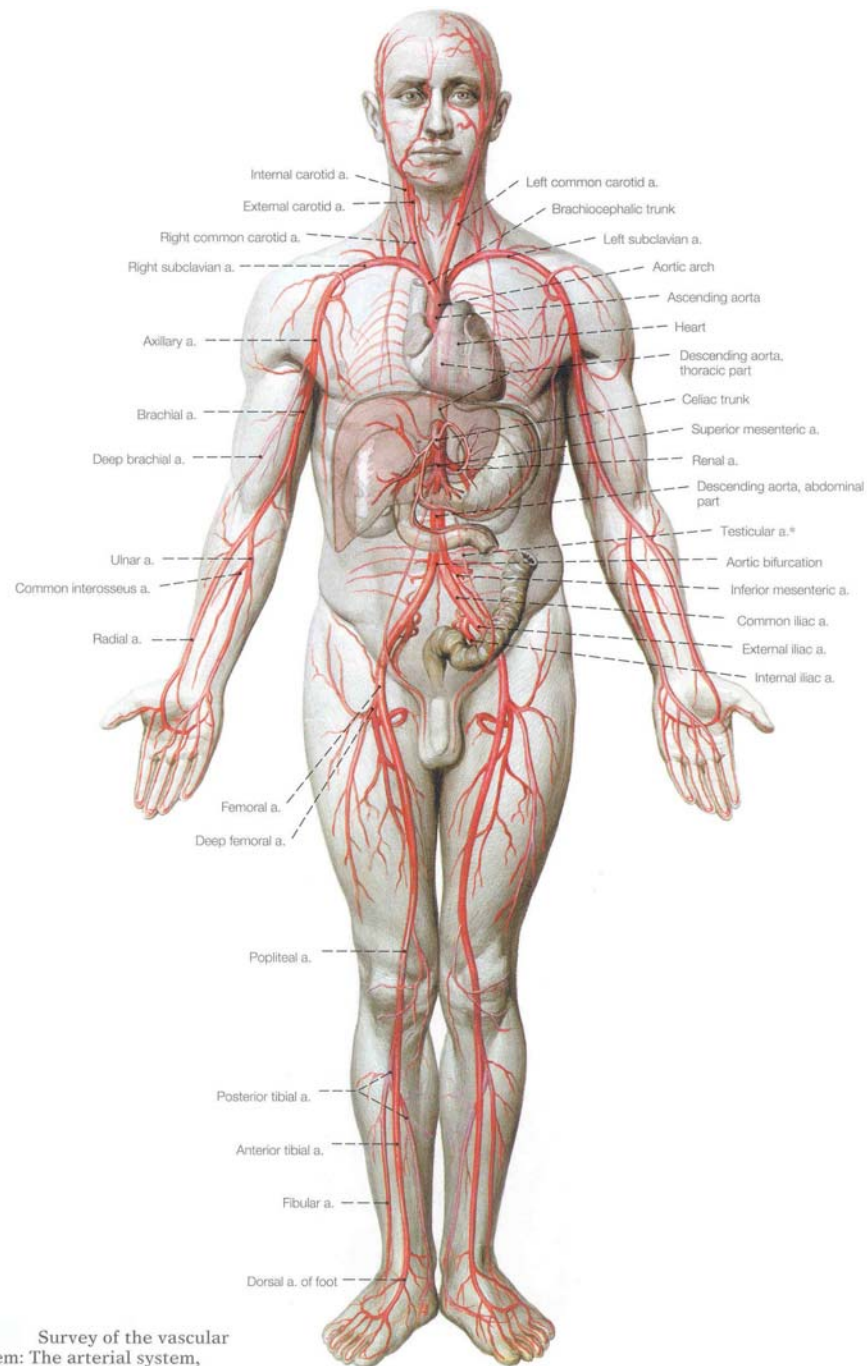


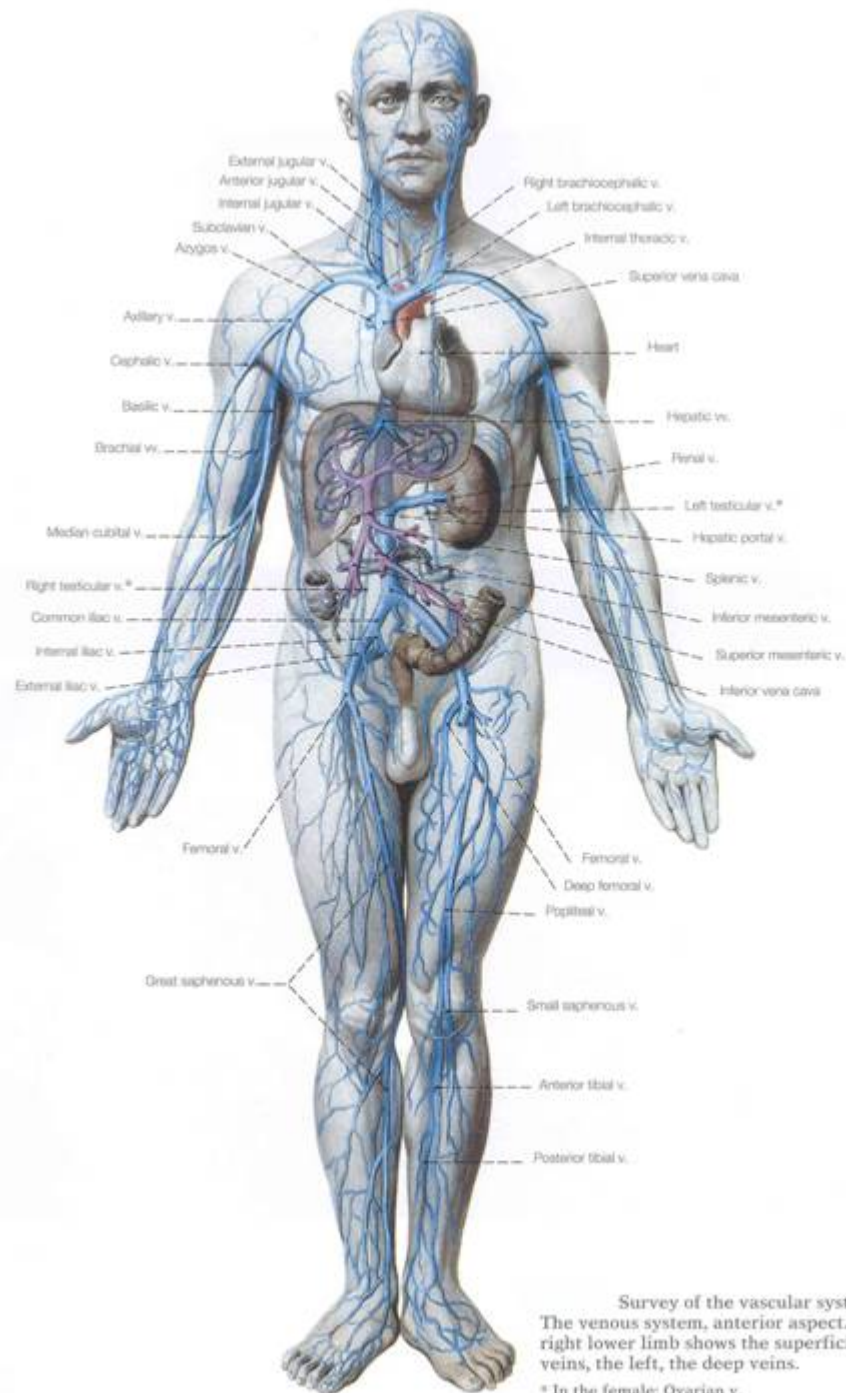
Biology 224
Human Anatomy and Physiology II
Week 2; Lecture 2; Wednesday
Dr. Stuart S. Sumida

Peripheral Circulation



Survey of the vascular system: The arterial system, anterior aspect.

* In the female: Ovarian a.



Survey of the vascular system:
The venous system, anterior aspect. The
right lower limb shows the superficial
veins, the left, the deep veins.

* In the female: Ovarian v.

UNPAIRED VESSELS OF THE BODY

Serve structures of the GUT
(splanchnopleure).

PAIRED VESSELS OF THE BODY

Serve structures associated with the body
wall (somatopleure.)

UNPAIRED ARTERIES OF THE ABDOMINAL GUT

Foregut: **Celiac Artery** (3 main branches)
Splenic, Left gastric, Hepatic

Midgut: **Superior Mesenteric Artery**

Hindgut: **Inferior Mesenteric Artery**

Celiac Artery and its Branches

celiac trunk

L. gastric a.

splenic a.

R. & L. hepatic arteries

short gastric arteries

common
hepatic artery

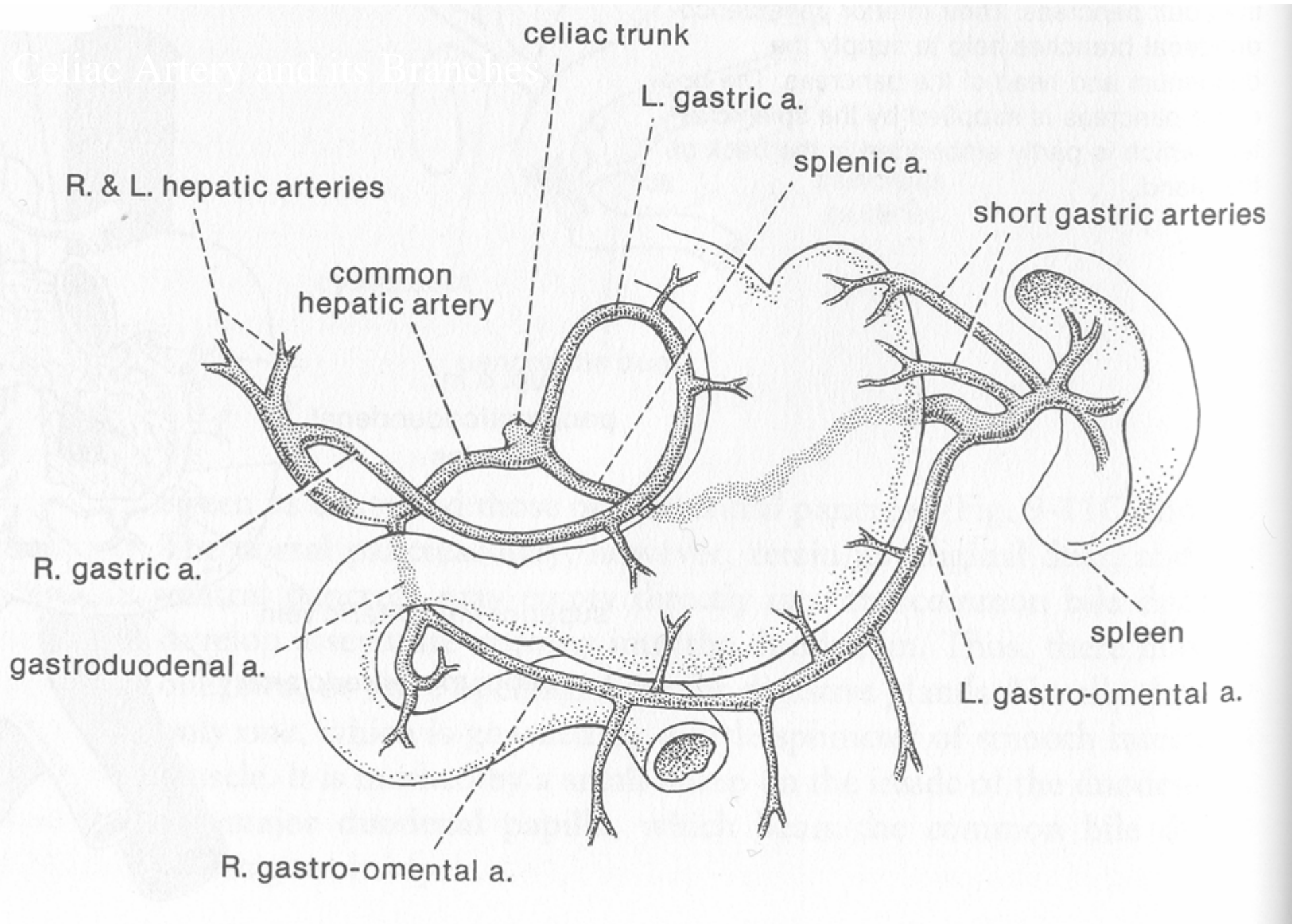
R. gastric a.

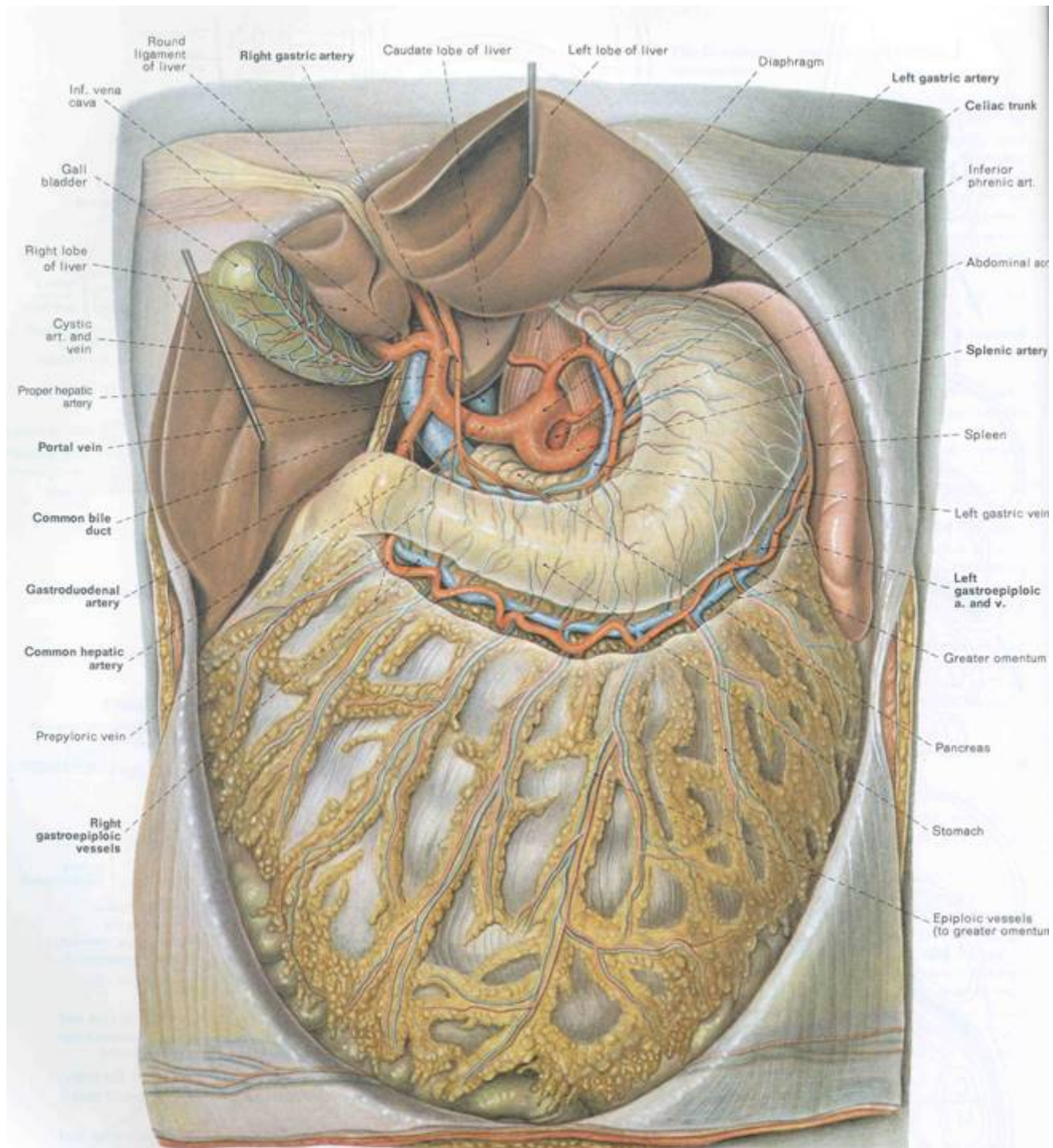
gastroduodenal a.

spleen

L. gastro-omental a.

R. gastro-omental a.





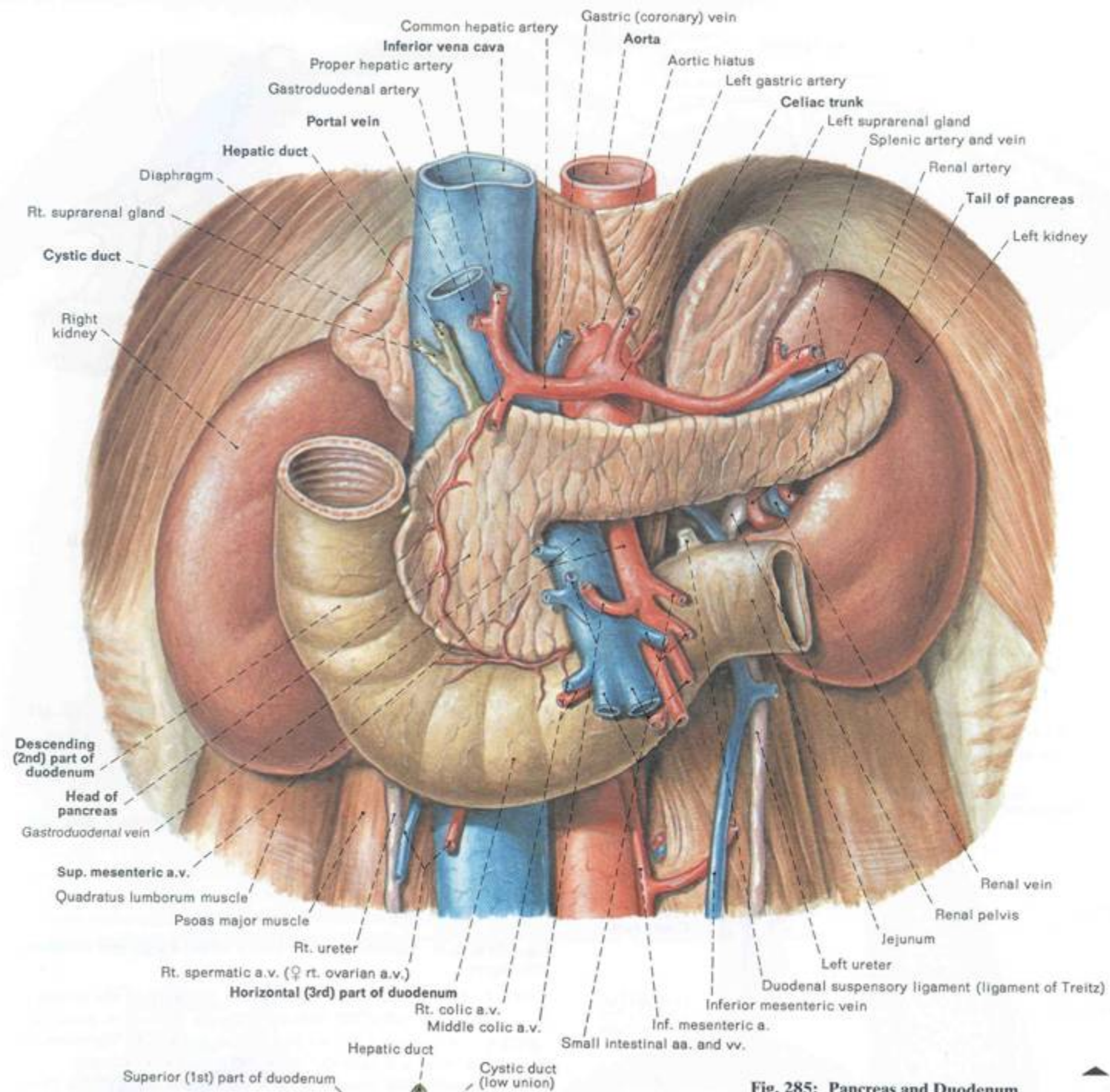
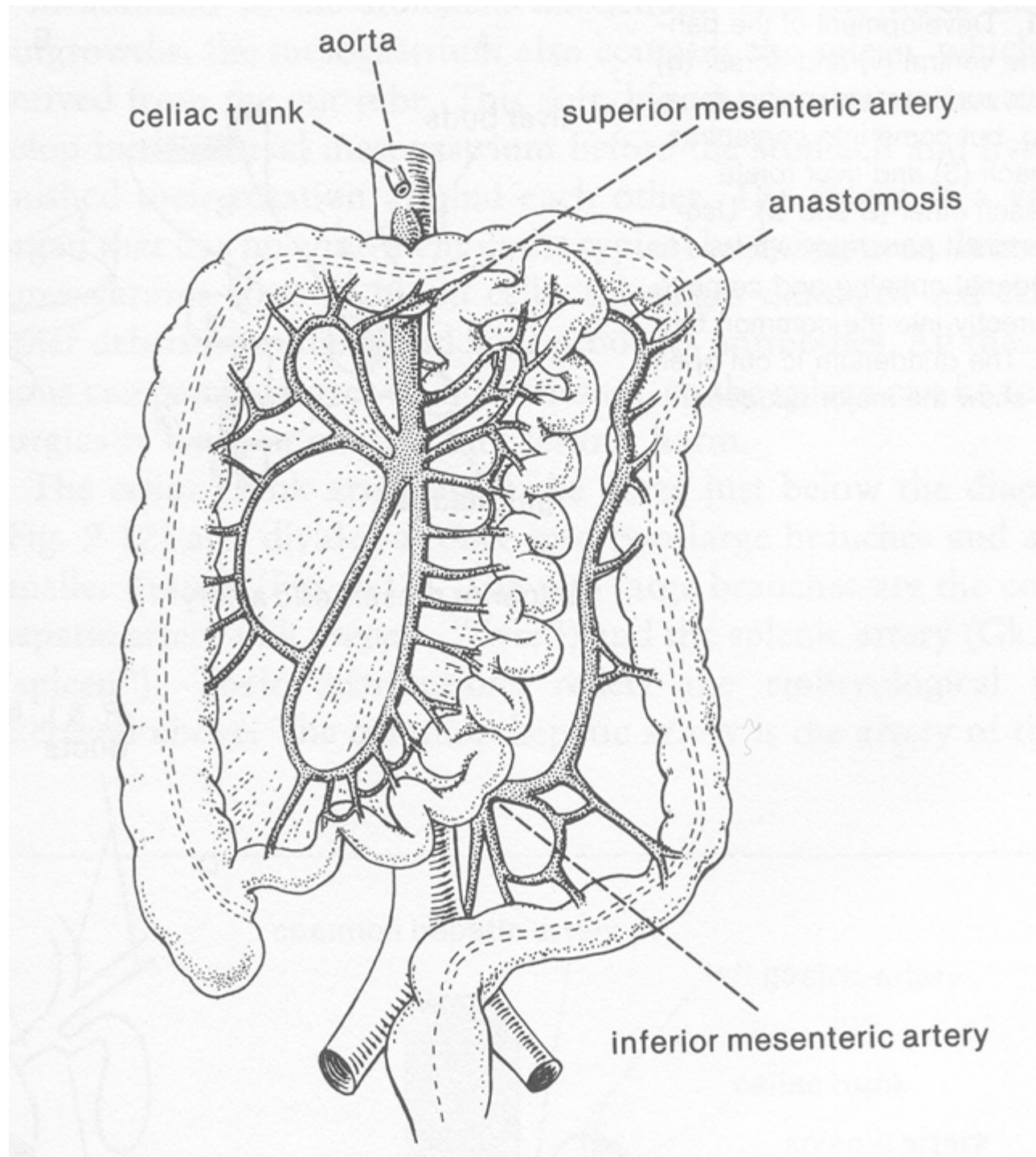
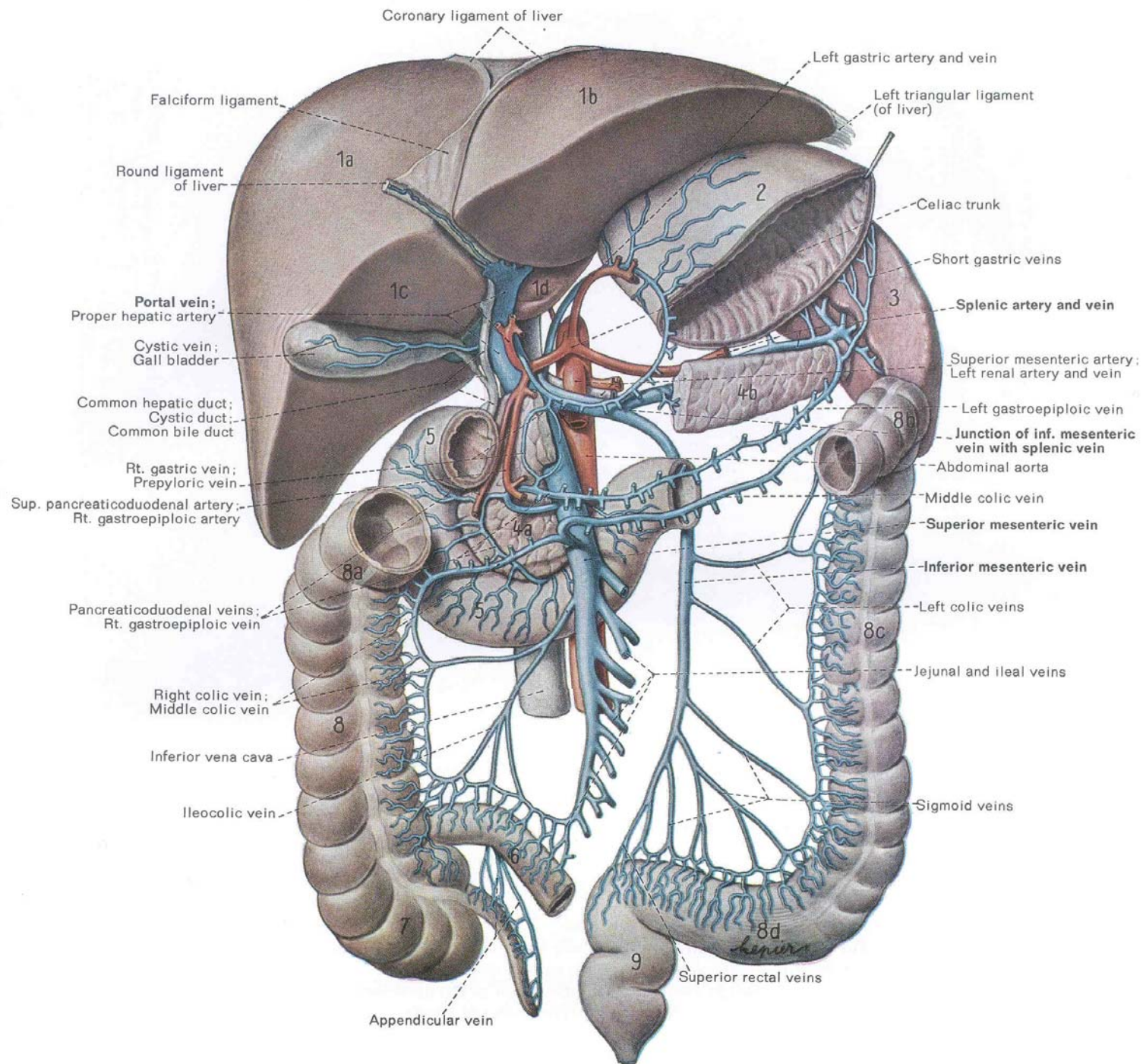


FIG. 285: Pancreas and Duodenum

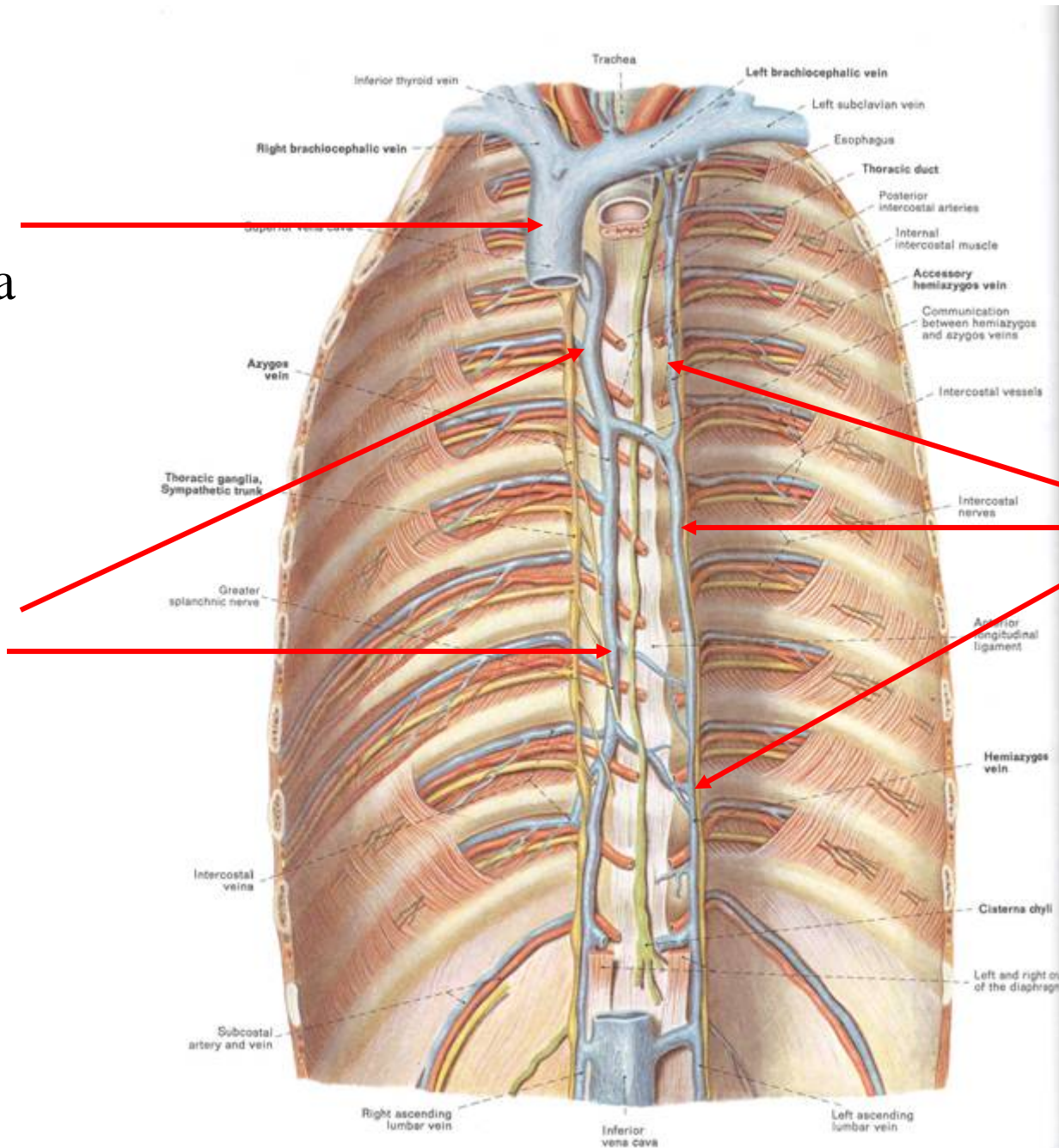


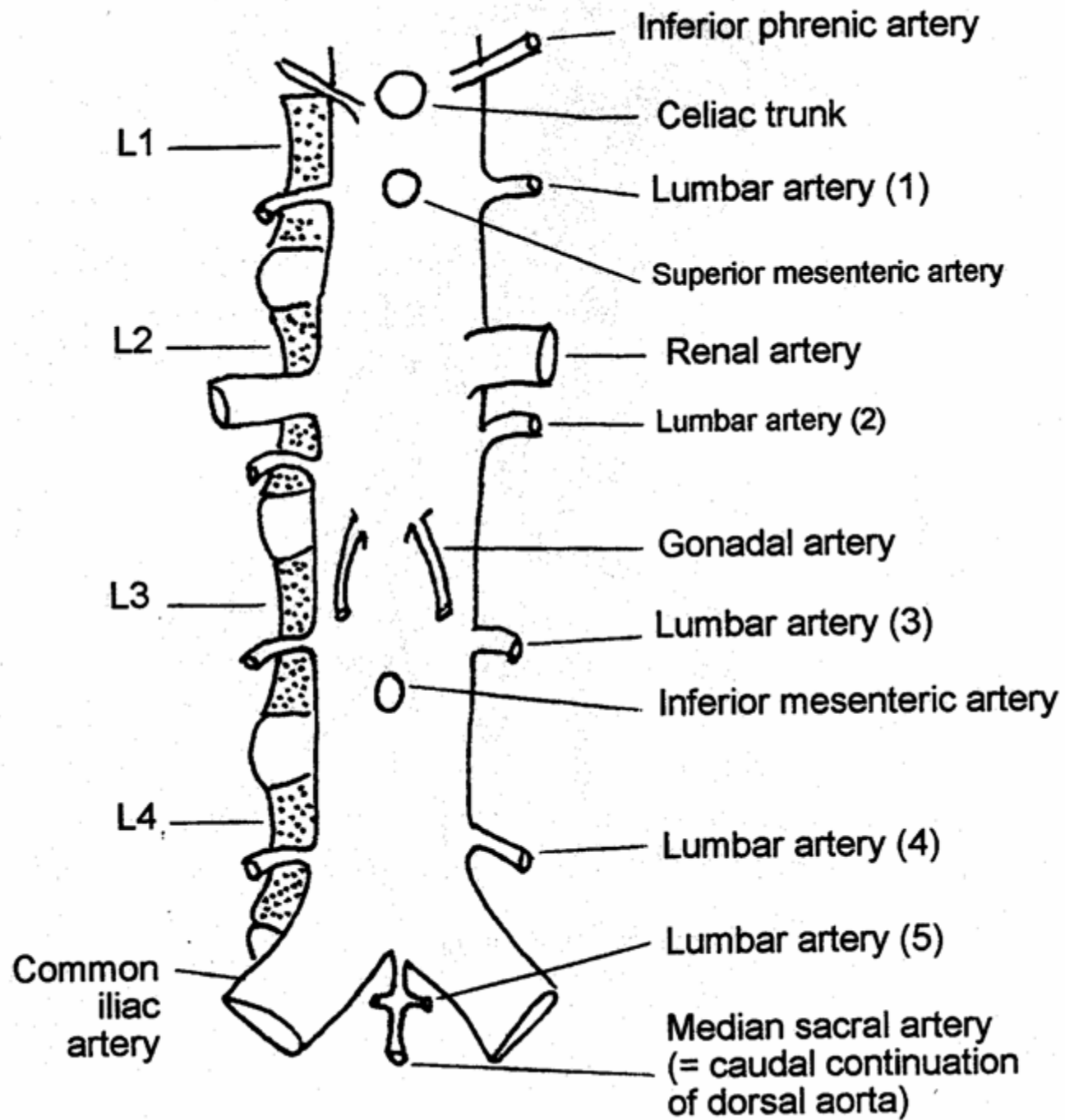


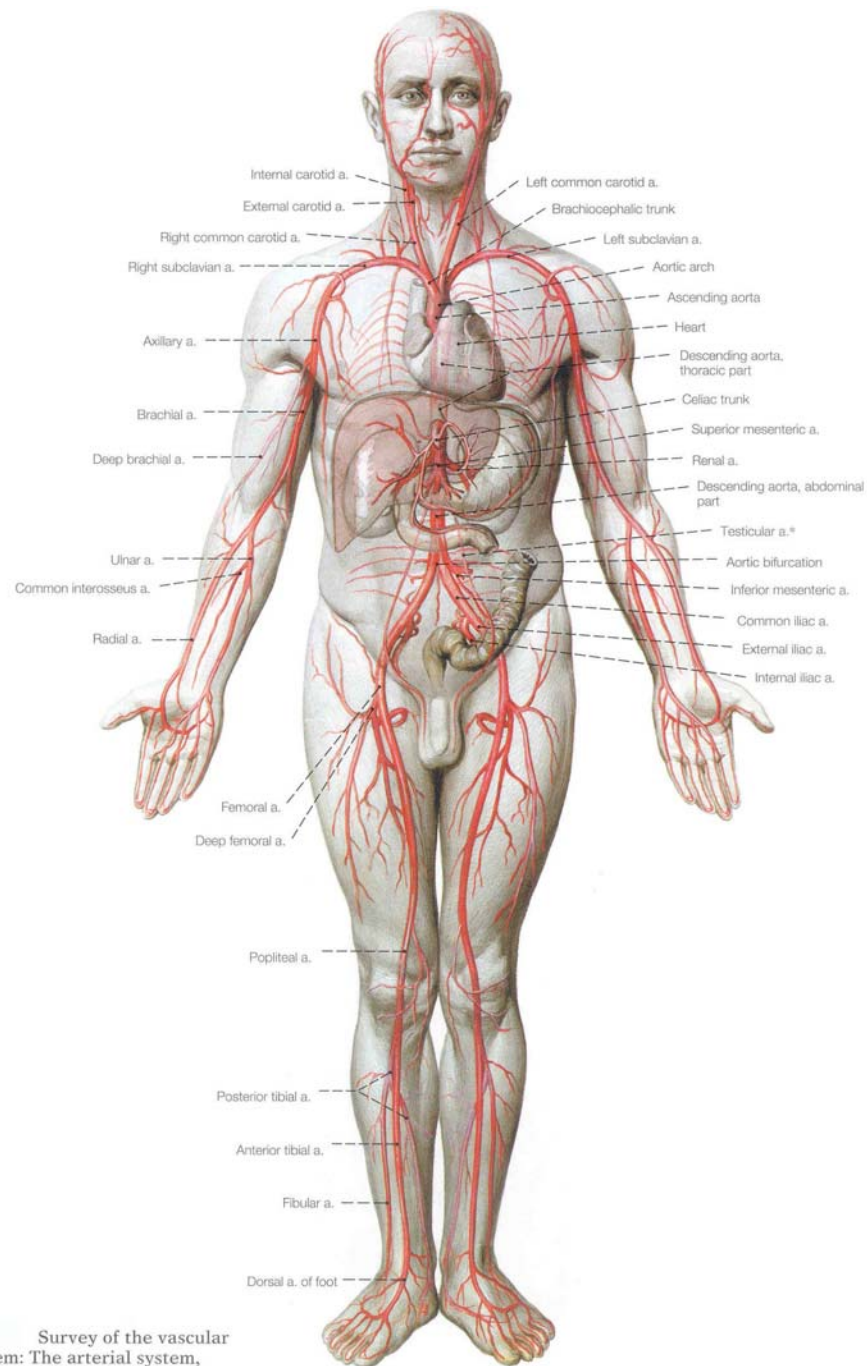
Superior
Vena Cava

Azygous
Vein

Hemiazygous
Vein



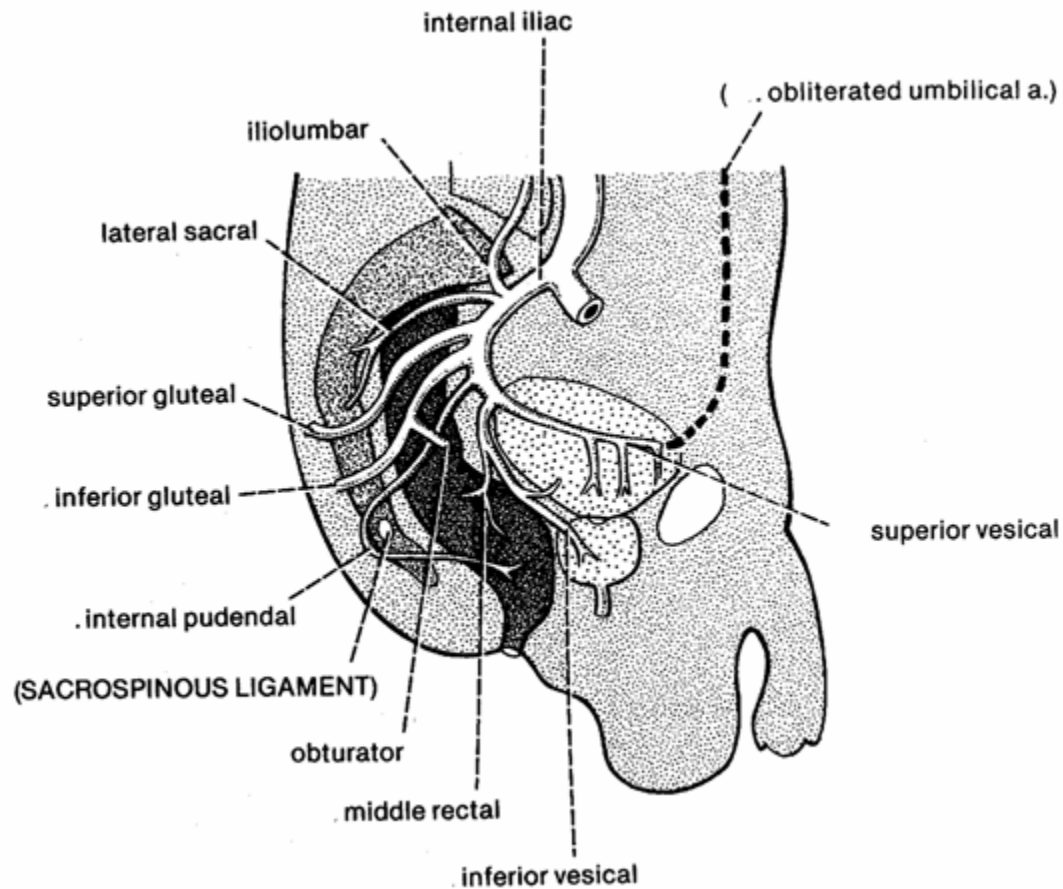




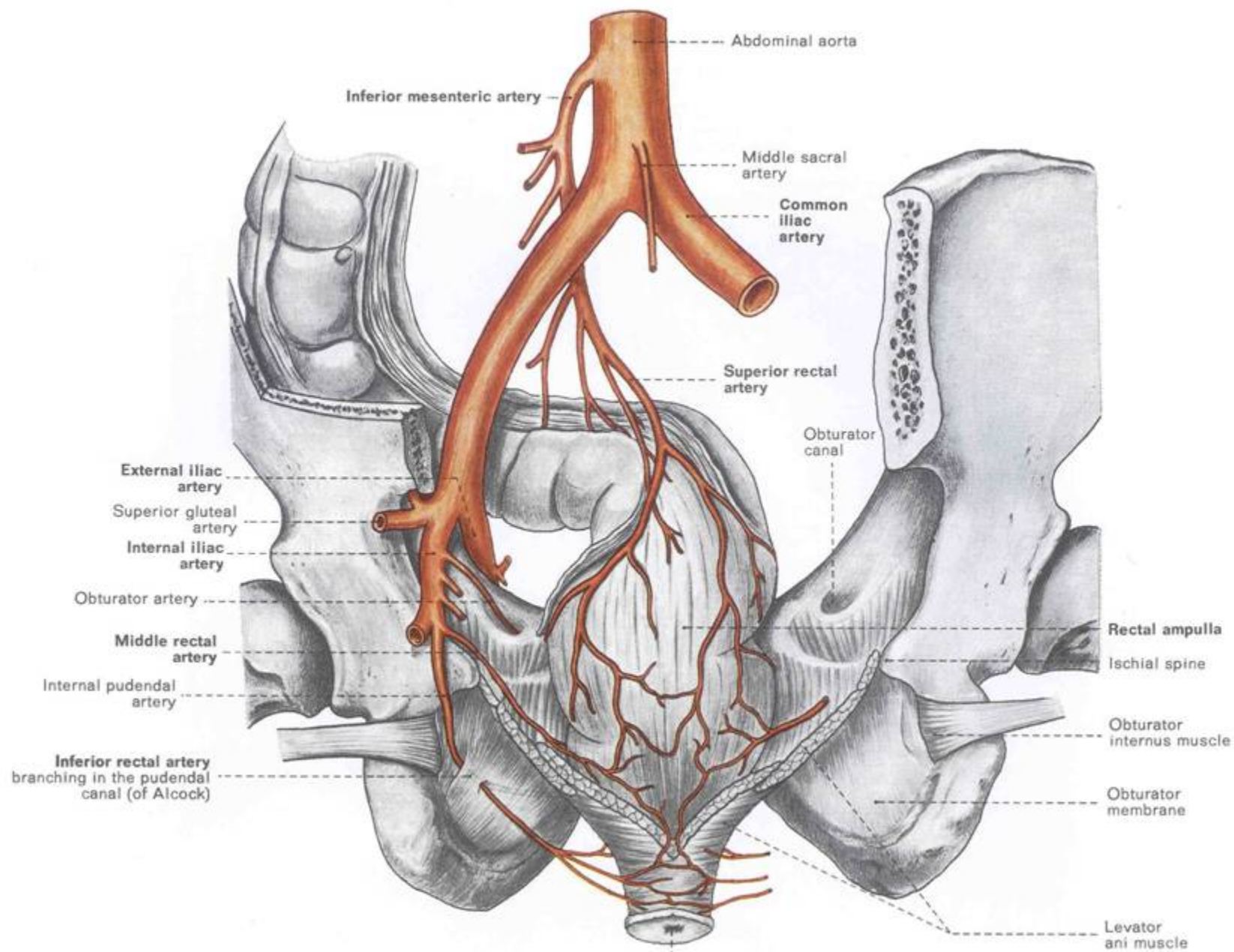
Survey of the vascular system: The arterial system, anterior aspect.

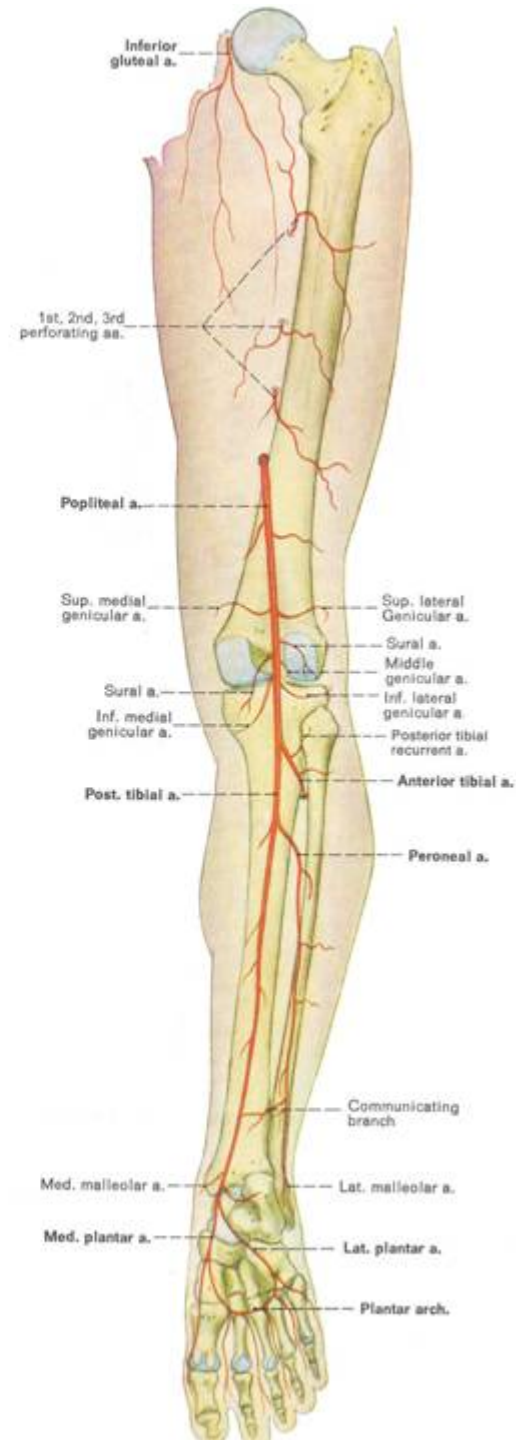
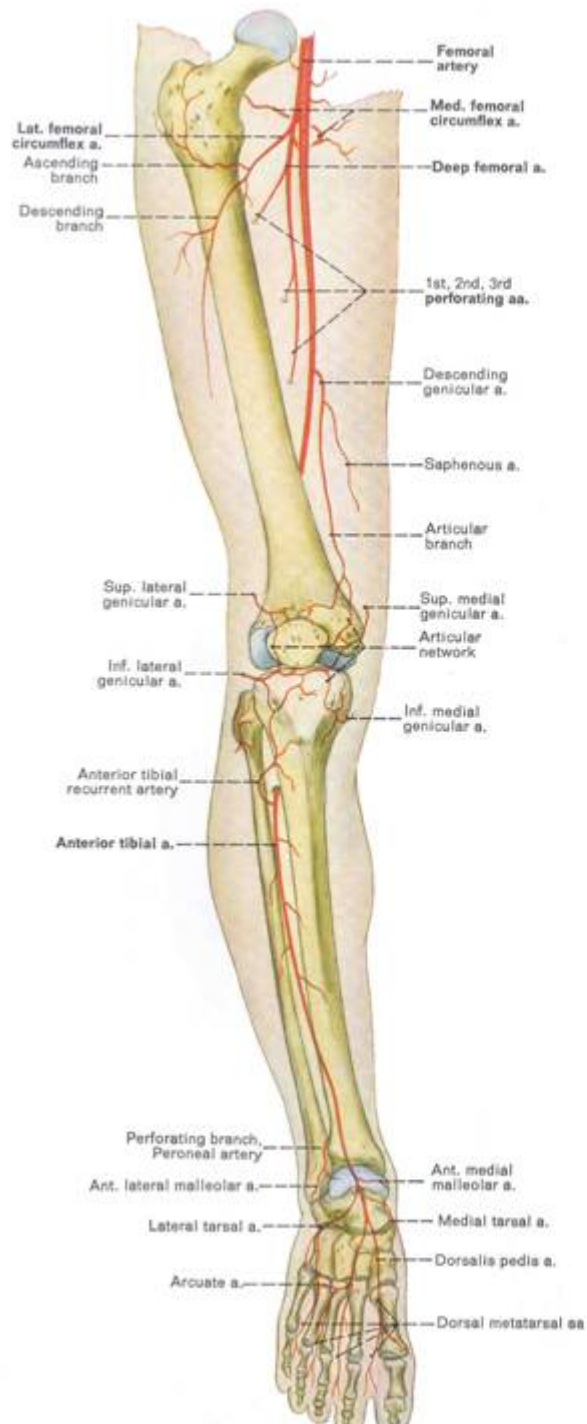
* In the female: Ovarian a.

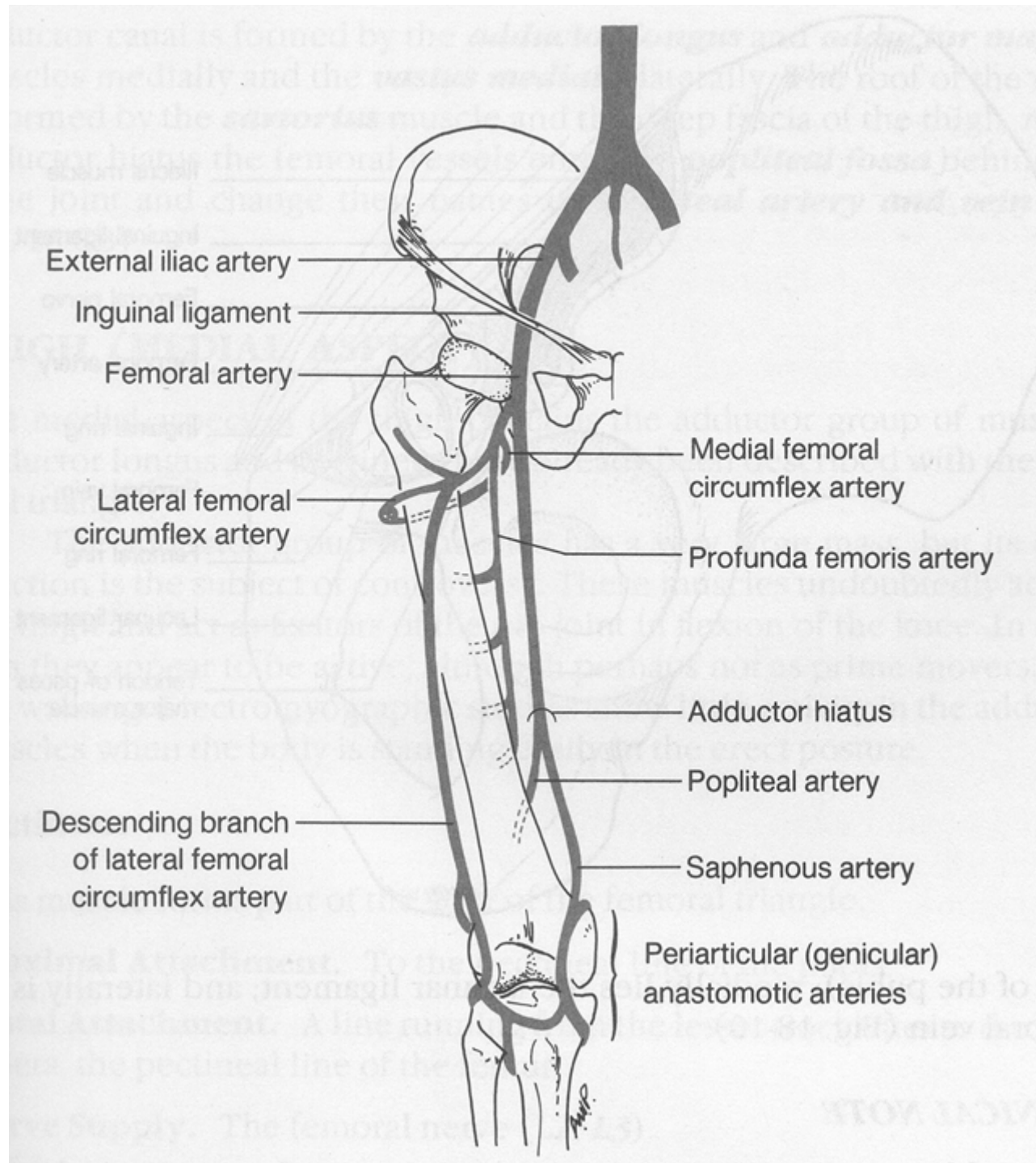
Branches of the Internal Iliac Artery (In order)

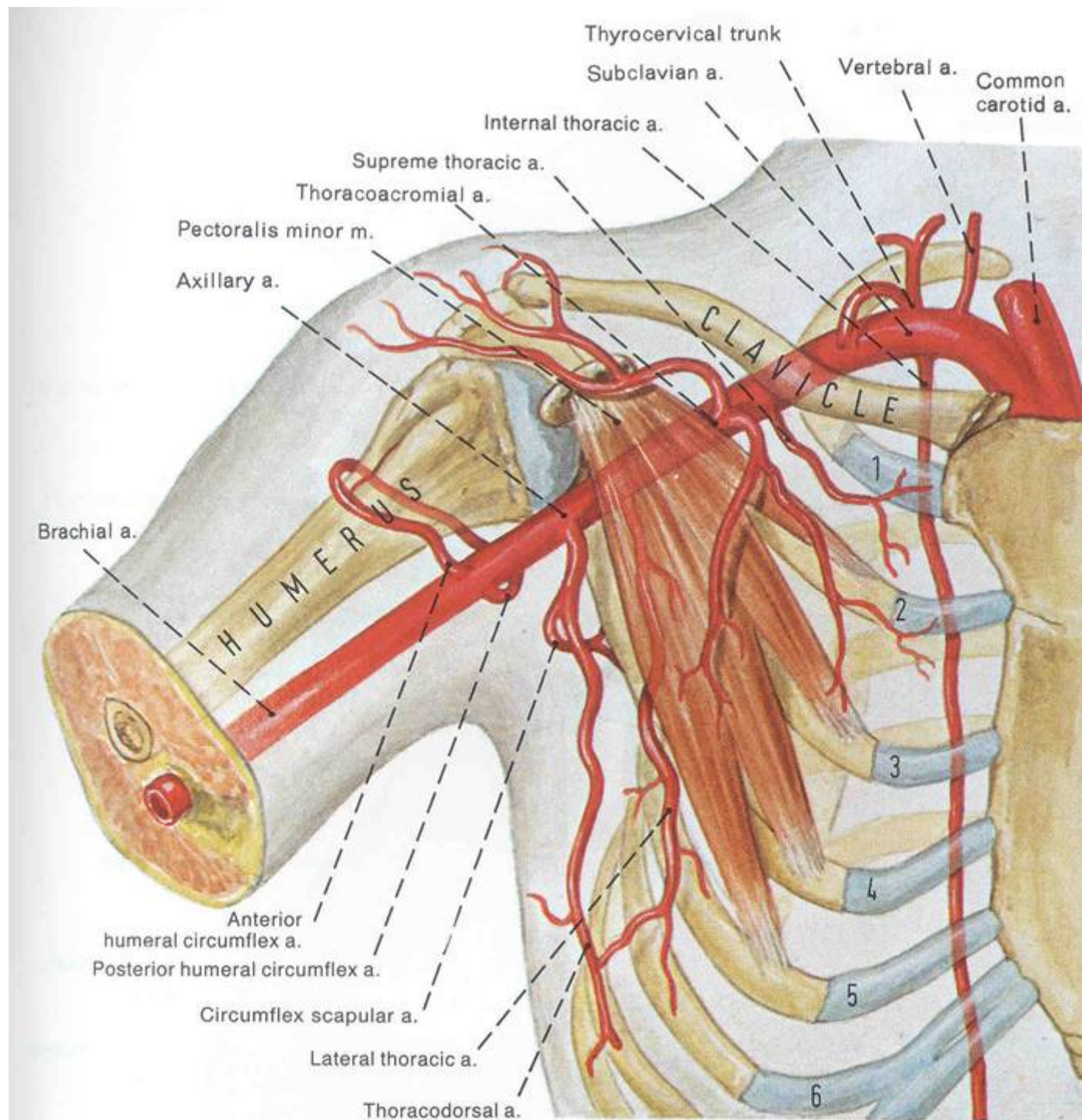


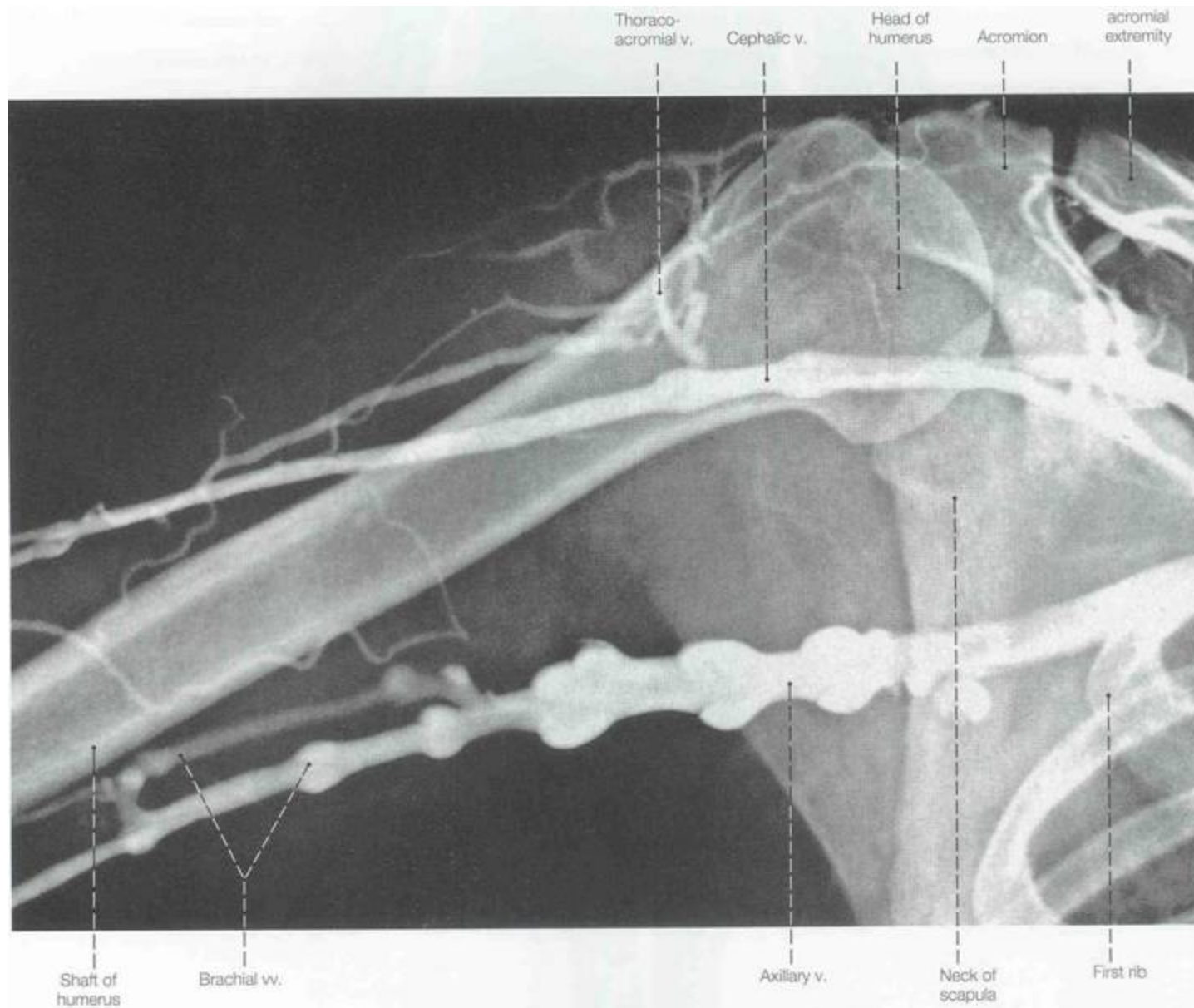
1. Iliolumbar
2. Lateral sacral
3. Superior gluteal
4. Inferior gluteal
5. Internal pudendal
6. Obturator
7. Middle rectal
8. Inferior vesicle
9. Superior vesicle
10. The old umbilical artery connects to end of internal iliac.











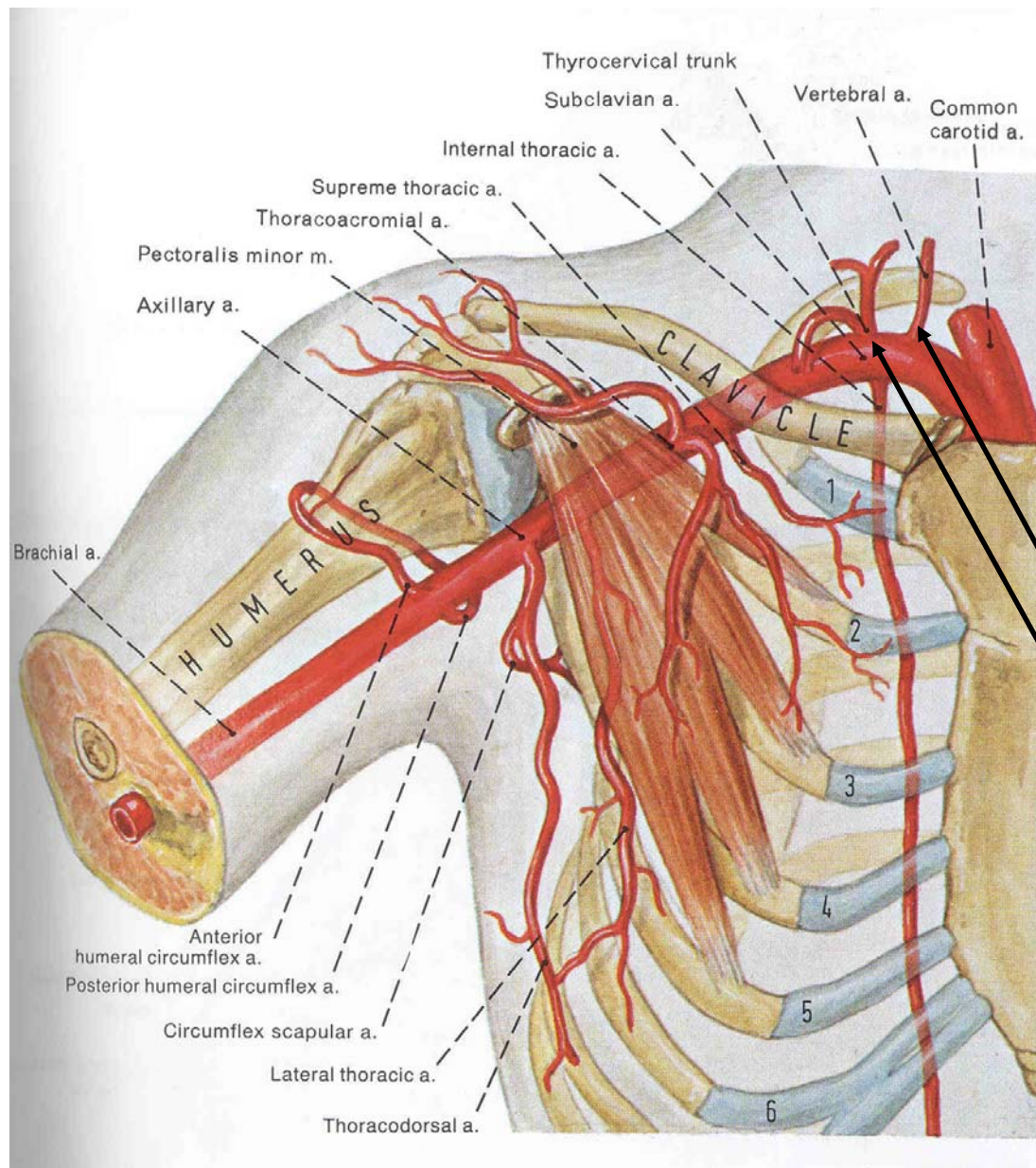
Radiograph (veno- or phlebogram) of the brachial, axillary, and cephalic veins and some of their tributaries, AP projection. Note the succession of valvular segments clearly visible in the axillary vein.

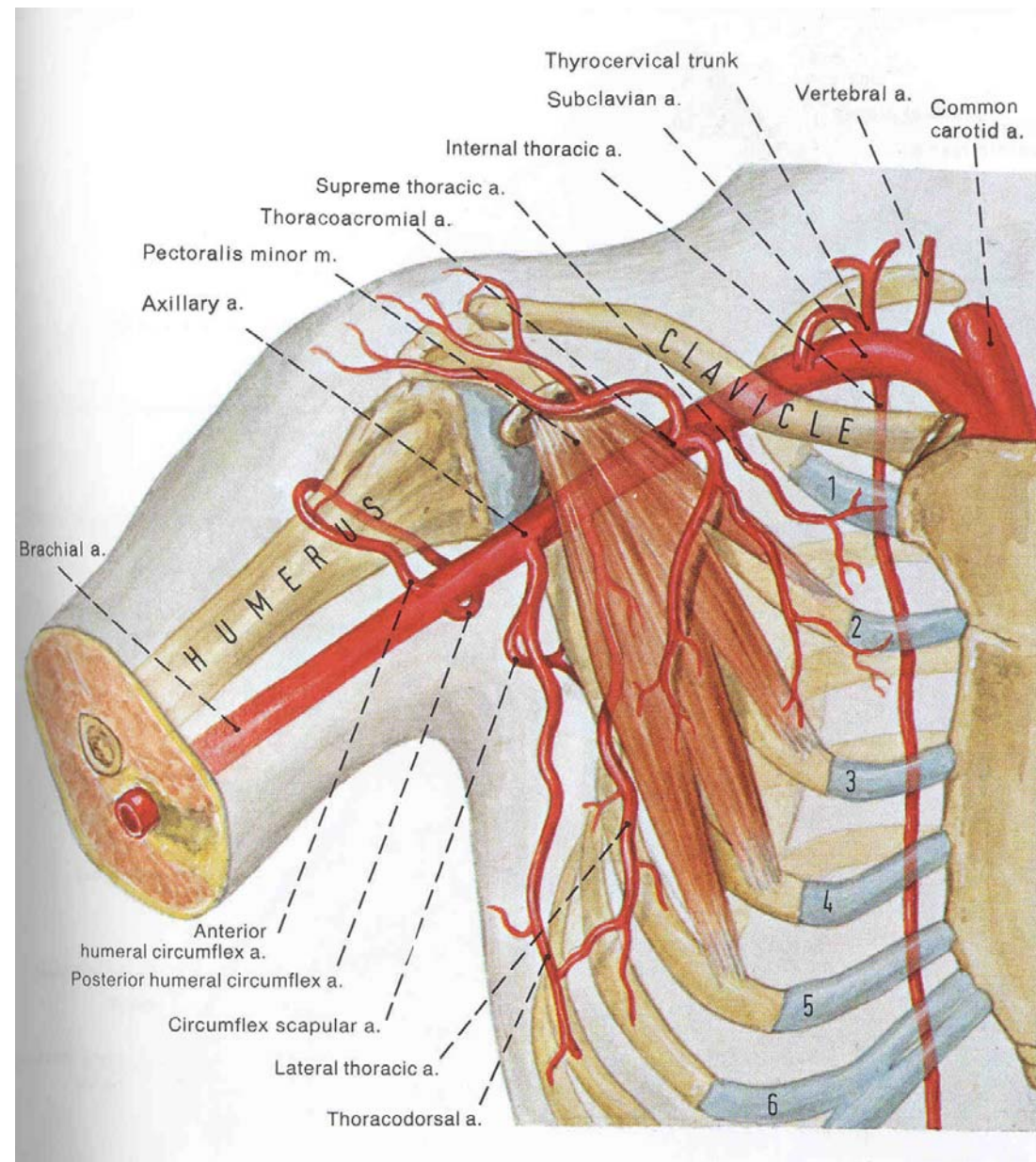
PAIRED ARTERIES OF THE BODY WALL: ARMS AND THORAX

- Subclavian Arteries
- 12 Intercostal Arteries
- Superior Phrenic Arteries (to diaphragm from above)

BEFORE it passes
the clavicle, the
subclavian
artery has 2
main branches:

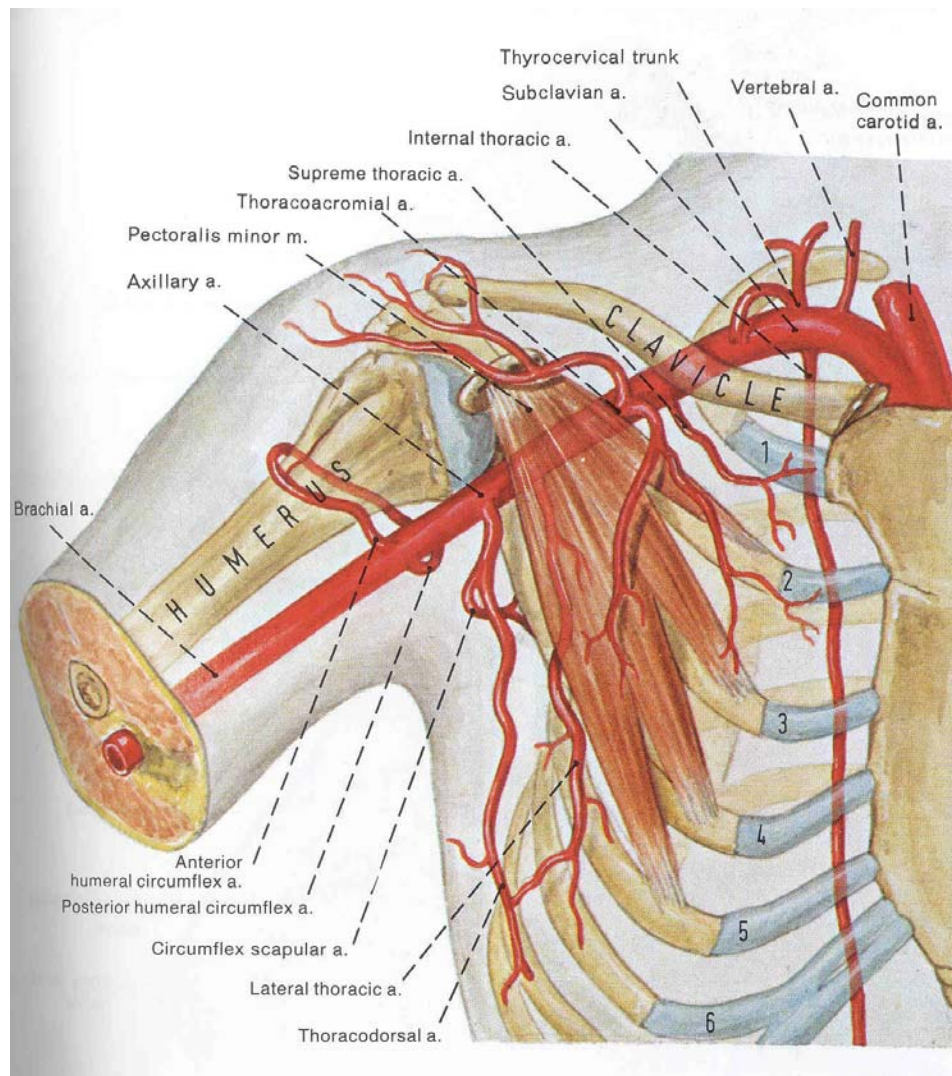
1. Vertebral a.
2. Thyrocervical trunk





Subclavian artery
becomes the
**AXILLARY
ARTERY.**

It has 6 branches,
organized relative
to the pectoralis
minor muscle.



6 banches of AXILLARY ARTERY.

“1 - 2 - 3”

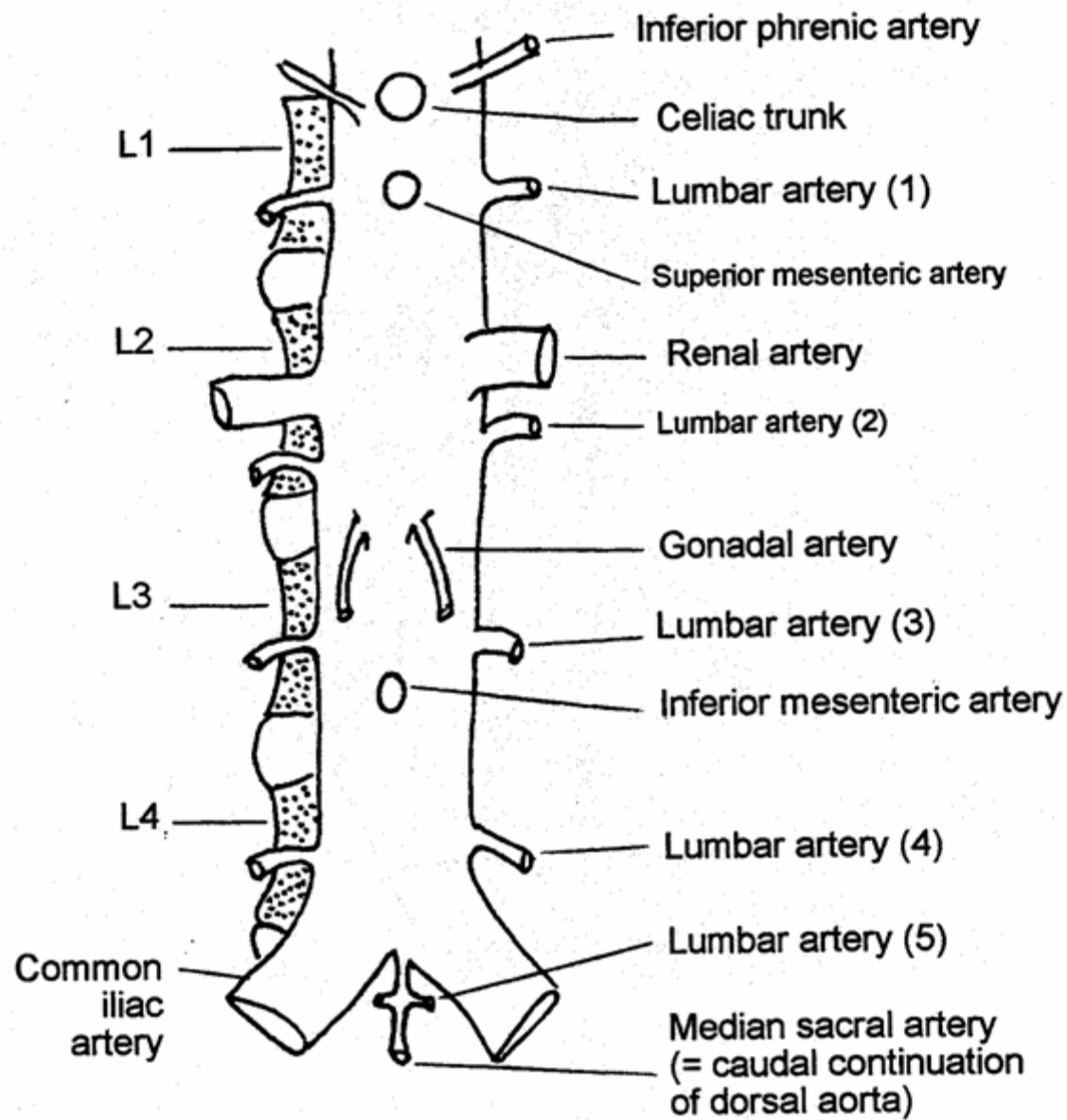
1 before pectoralis minor: *supreme thoracic a.*

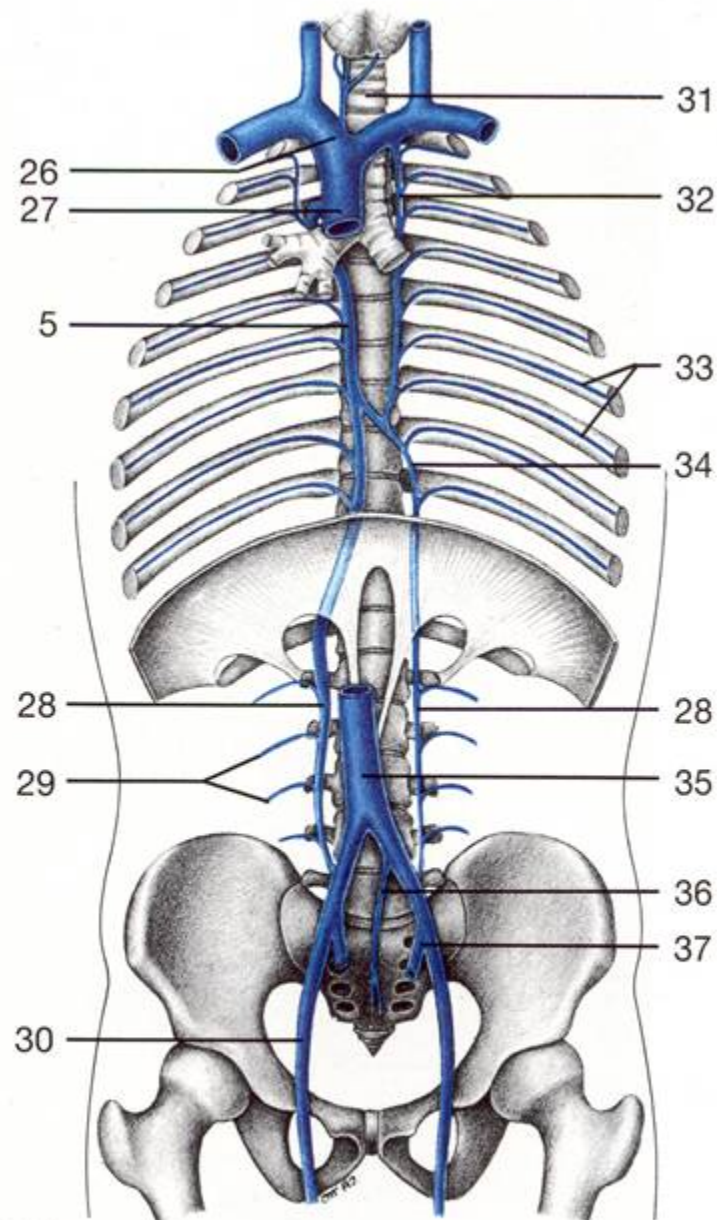
2 deep to pectoralis minor: *thoracoacromial a.* and *lateral thoracic a.*

3 beyond pectoralis minor: *anterior humeral circumflex a.*, *posterior humeral circumflex a.*, and *subscapular a.*

PAIRED ARTERIES OF THE BODY WALL: ABDOMEN

- Lumbar arteries (5)
- Renal arteries
- Gonadal (ovarian, testicular) arteries
- Common Iliac Arteries; Branches:
 - External Iliac Arteries
 - Internal Iliac Arteries





Veins of the posterior wall of thoracic and abdominal cavity. (Schematic drawing.)

**Body wall veins
parallel the
arteries.**

PORTAL SYSTEMS

A circulatory system (set of tubes) with a capillary bed at BOTH ends.

Hepatic Portal System

Foregut: Splenic Vein (= Lienic Vein)

Midgut: Superior Mesenteric Vein

Hindgut: Inferior Mesenteric Vein

All dump into Hepatic Portal Vein, which goes to Liver.

