

Arteries

Thorax

I. Pulmonary trunk (L. pulmo, lung)

- A. Right pulmonary a.
 - 1. Superior branch
 - a. Apical segmental a.
 - b. Posterior segmental a.
 - c. Anterior segmental a.
 - 2. Inferior branch
 - a. Lateral segmental a.
 - b. Medial segmental a.
 - c. Superior segmental a.
 - d. Medial basal segmental a.
 - e. Anterior basal segmental a.
 - f. Lateral basal segmental a.
 - g. Posterior basal segmental a.
- B. Left pulmonary a.
 - 1. Superior branch
 - a. Apical segmental a.
 - b. Posterior segmental a.
 - c. Anterior segmental a.
 - d. Superior lingual segmental a.
 - e. Inferior lingual segmental a.
 - 2. Inferior branch
 - a. Superior segmental a.
 - b. Anterior basal segmental a.
 - c. Lateral basal segmental a.
 - d. Posterior basal segmental a.

II. Ascending aorta (L. aorte, to lift up)

- A. Right coronary a. (L. coronarius, a crown)
 - 1. Right conus a.
 - 2. Atrial rami (L. atrium, an entrance hall; L. ramus, a branch)
 - a. SA nodal a.
 - 3. Right marginal branches
anastomoses – anterior interventricular a.
 - 4. AV nodal a.
 - 5. Posterior interventricular a.
anastomoses – anterior interventricular
 - a. Posterior septal a.
- B. Left coronary a.
 - 1. Anterior interventricular a.
anastomoses – right marginal & posterior interventricular a.
 - a. Anterior septal a.
 - 2. Left conus a.
 - 3. Diagonal a.
 - 4. Left atrial rami
 - 5. Circumflex branch (L. to bend around)
anastomoses – right coronary
 - a. Left marginal branches

III. Arch of the aorta

- A. Brachiocephalic a.
- B. Left common carotid a. (G. karotides, to put to sleep [by compression of this artery])
- C. Left subclavian a.
 - 1. Thyrocervical trunk
 - 2. Costocervical trunk
 - a. Superior intercostal a. (spaces 1 & 2)
anastomoses – anterior intercostal a.

3. Axillary a.
 - a. Superior thoracic a.
4. Internal thoracic a.
 - a. Pericardiophrenic a.
anastomoses – inferior phrenic a.
 - b. Anterior intercostal a. (1 – 6)
anastomoses – posterior intercostals a.
 - c. Musculophrenic a.
anastomoses – inferior phrenic, lower posterior intercostals & deep circumflex iliac a.
 - i. Anterior intercostals (7–9)
anastomoses – posterior intercostals a.
 - d. Superior epigastric a.
anastomoses – inferior epigastric & contralateral superior epigastric a.

IV. Descending (thoracic) aorta

- A. Bronchial a. (G. bronchos, windpipe)
- B. Esophageal a. (G. oisophagos, gullet)
anastomoses – esophageal branches of left gastric
- C. Posterior intercostal a. (spaces 3–11)
anastomoses – anterior intercostals (1 – 6), musculophrenic (lower intercostals) a.
- D. Subcostal a.
anastomoses – lower intercostals, inferior epigastric, deep circumflex iliac & 1st lumbar a.

Abdomen

- I. Abdominal aorta
 - A. Inferior phrenic a. (G. phren, diaphragm)
anastomoses – contralateral inferior phrenic, musculophrenic, pericardiophrenic & lower intercostals a.
 1. Superior suprarenal a.
anastomoses – middle suprarenal a.
 - B. Celiac trunk (G. koilia, belly) (supplies viscera derived from the embryonic foregut)
 1. Left gastric a. (G. gaster, the belly)
anastomoses – right gastric & short gastric a.
 - a. Esophageal branches
anastomoses – esophageal branches of aorta
 2. Common hepatic a. (G. hepar, liver)
 - a. Right gastric a.
anastomoses – left gastric a.
 - b. Gastroduodenal a. (L. duodenum [digitorum], breadth of 12 fingers)
 - i. R. gastroepiploic a. (L. omentum)
anastomoses – left gastroepiploic a.
 - ii. Superior pancreaticoduodenal arteries (G. pankreas, the sweetbread, fr. pas [pan], all, + kreas, flesh)
anastomoses – inferior pancreaticoduodenal & dorsal pancreatic
 - c. Hepatic proper a.
 - i. Left hepatic a. (left, caudate & quadrate lobes)
 - ii. Right hepatic a. (right & some quadrate lobes)
 - (G. kystis, bladder, pouch)
 3. Splenic a. (G. splen)
 - a. Short gastric arteries
anastomoses – left gastric a.
 - b. Dorsal pancreatic a.
anastomoses – superior & inferior pancreaticoduodenal, & great pancreatic a.
 - c. Great pancreatic a.
anastomoses – superior & inferior pancreaticoduodenal & dorsal pancreatic a.
 - d. Left gastroepiploic a.
anastomoses – right gastroepiploic a.
 - C. Superior mesenteric a. (G. mesos, middle, + enteron, intestine) (supplies viscera derived from the embryonic midgut)
 1. Inferior pancreaticoduodenal arteries
anastomoses – superior pancreaticoduodenal, dorsal pancreatic & jejunal a.

2. Jejunal branches (L. *jejunus*, empty)
anastomoses – inferior pancreaticoduodenal & ileal a.
 3. Ileal branches (L. *eileo*, to roll up, twist)
anastomoses – jejunal & ileocolic a.
 4. Ileocolic a. (G. *kolon*)
anastomoses – ileal & right colic a.
 5. Right colic a.
anastomoses – ileocolic & middle colic a.
 6. Middle colic a.
anastomoses – right colic & left colic a.
- D. Inferior mesenteric a. (supplies viscera derived from the embryonic hindgut)
1. Left colic a.
anastomoses – middle colic & sigmoid a.
 2. Sigmoid a. (G. *sigma*, the letter S, + *eidos*, resemblance)
anastomoses – left colic & superior rectal a.
 3. Superior rectal a. (L. *rectus*, straight)
anastomoses – sigmoid & inferior rectal a.
- E. Middle suprarenal arteries
anastomoses – superior suprarenal & inferior suprarenal a.
- F. Ovarian or testicular a. (L. *ovarium*, egg; G. *orchis*, testis)
anastomoses – uterine a., or cremasteric & ductus deferens a.
- G. Renal a. (G. *nephros*, kidney)
1. Segmental arteries
 2. Inferior suprarenal a.
anastomoses – middle suprarenal a.
- H. Lumbar arteries (L. *lumbus*, a loin)
anastomoses – 1 & 2 with subcostal, & 4th with iliolumbar

Pelvis

- I. Common iliac a. (L. *groin, flank*)
 - A. Median sacral a. (L. *os sacrum*, sacred bone)
anastomoses – iliolumbar & lateral sacral a.
- II. External iliac a.
 - A. Inferior epigastric a.
anastomoses – superior epigastric, subcostal & lumbar a.
 1. Cremasteric a.
anastomoses – testicular & ductus deferens a.
 - B. Deep circumflex iliac a.
anastomoses – iliolumbar, superior gluteal, subcostal, musculophrenic & superficial circumflex iliac a.
- III. Internal iliac a.
 - A. Umbilical a. (L. *navel*)
 - B. Superior vesical a. (L. *vesica*, bladder)
 1. Ductus deferens branch (L. *a leading*; L. *deferens*, to carry away)
anastomoses – testicular & cremasteric a.
 - C. Inferior vesical a.
 1. Vaginal branch (L. *sheath*)
anastomoses – uterine a.
 - D. Middle rectal a.
 - E. Uterine a. (L. *womb*)
anastomoses – ovarian & vaginal a.
 - F. Obturator a. (L. *obturo*, to occlude or stop up)
anastomoses – iliolumbar, medial circumflex femoral & inferior gluteal
 - G. Internal pudendal a. (L. *pudendus*, to feel ashamed)
 1. Inferior rectal a.
anastomoses – superior rectal a.
 2. Perineal a. (L. *perineos*)
 - a. Posterior labial or scrotal branches (L. *lip*)
anastomoses – superficial external pudendal & deep external pudendal a.
 3. Deep artery of the clitoris or penis (G. *kleitoris*; L. *penis, tail*)

anastomoses – dorsal a.

4. Dorsal artery of the clitoris or penis

anastomoses – deep a.

- H. Inferior gluteal (under lower extremity)

- I. Superior gluteal (under lower extremity)

- J. Iliolumbar

anastomoses – 4th lumbar, superior gluteal, deep circumflex iliac, obturator and lateral circumflex femoral a.

- K. Lateral sacral

anastomoses – median sacral