

Anatomická schémata

Autoři:

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Anatomický ústav – Teoretická pracoviště

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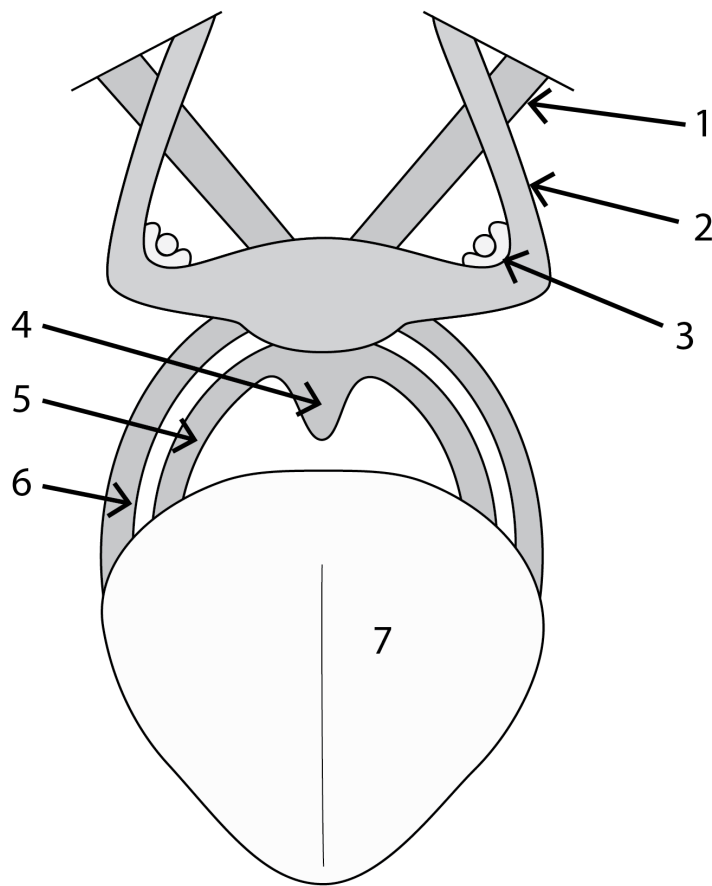


Fig. 1 Muscles of the soft palate

1. Levator veli palatini
2. Tensor veli palatini
3. Pterygoid hamulus
4. Musculus uvulae
5. Palatopharyngeus
6. Palatoglossus
7. Tongue

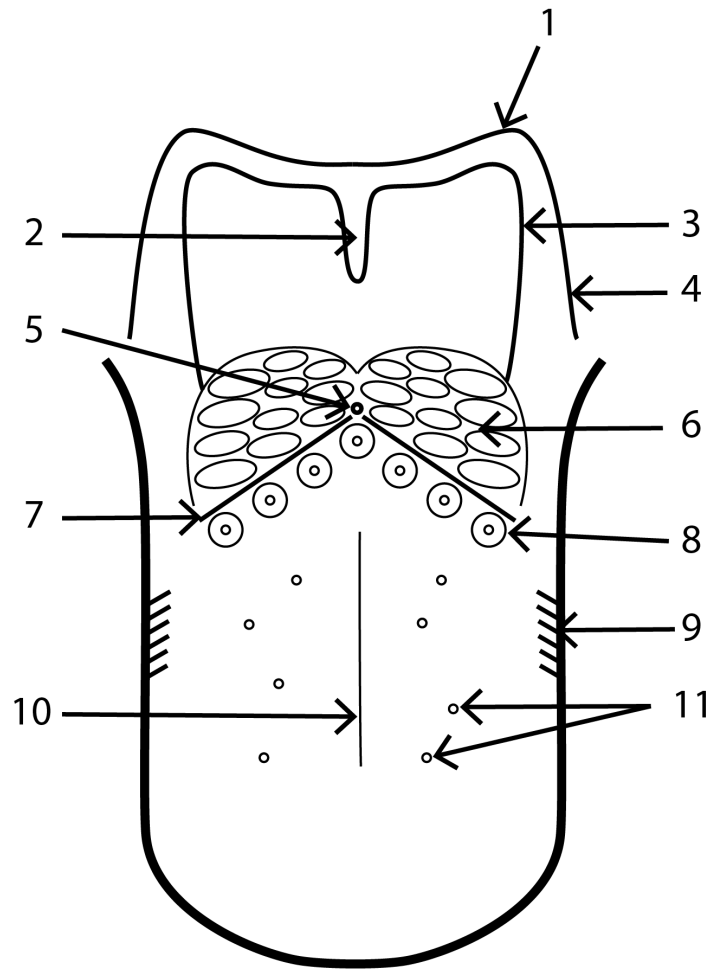


Fig. 2 Dorsum of the tongue

1. Soft palate
2. Uvula
3. Palatopharyngeal arch
4. Palatoglossal arch
5. Foramen caecum
6. Lingual tonsil
7. Terminal sulcus
8. Vallate papillae
9. Foliate papillae
10. Midline groove of tongue
11. Fungiform papillae

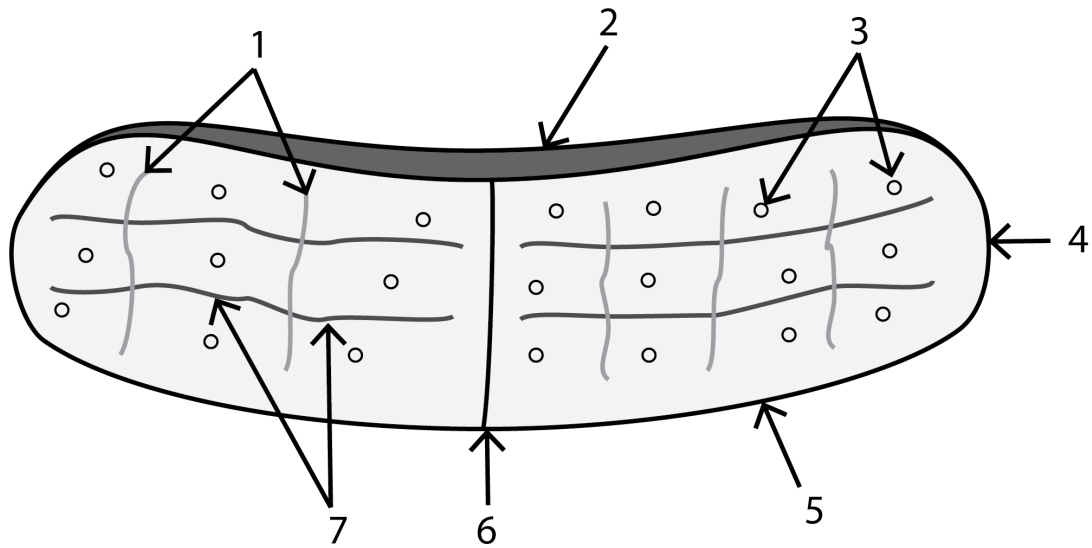


Fig. 3 Tongue – intrinsic muscles (cross section)

1. Vertical muscle
2. Dorsum of tongue
3. Longitudinal muscle
4. Margin of tongue
5. Inferior surface of tongue
6. Lingual septum
7. Transverse muscle

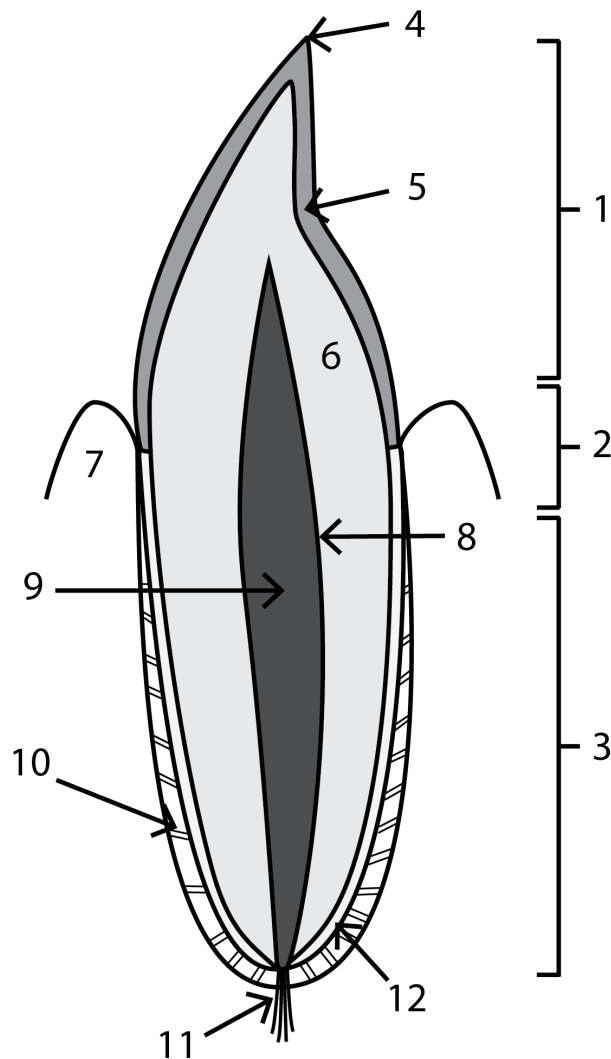


Fig. 4 General structure of the tooth (longitudinal section)

1. Crown
2. Neck
3. Root
4. Cusp
5. Enamel
6. Dentine
7. Gingiva
8. Pulp cavity
9. Dental pulp
10. Periodontium
11. Root apex with vessels and nerves
12. Cement

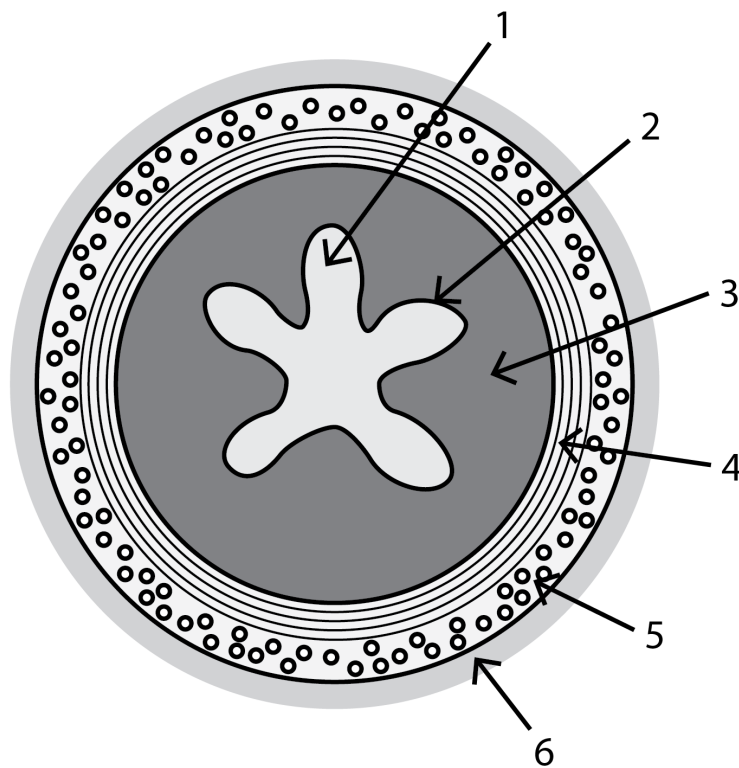


Fig. 5 Oesophagus (cross section)

1. Lumen
2. Epithelium
3. Mucosa and submucosa
4. Circular layer of musculature
5. Longitudinal layer of musculature
6. Adventitia/serosa

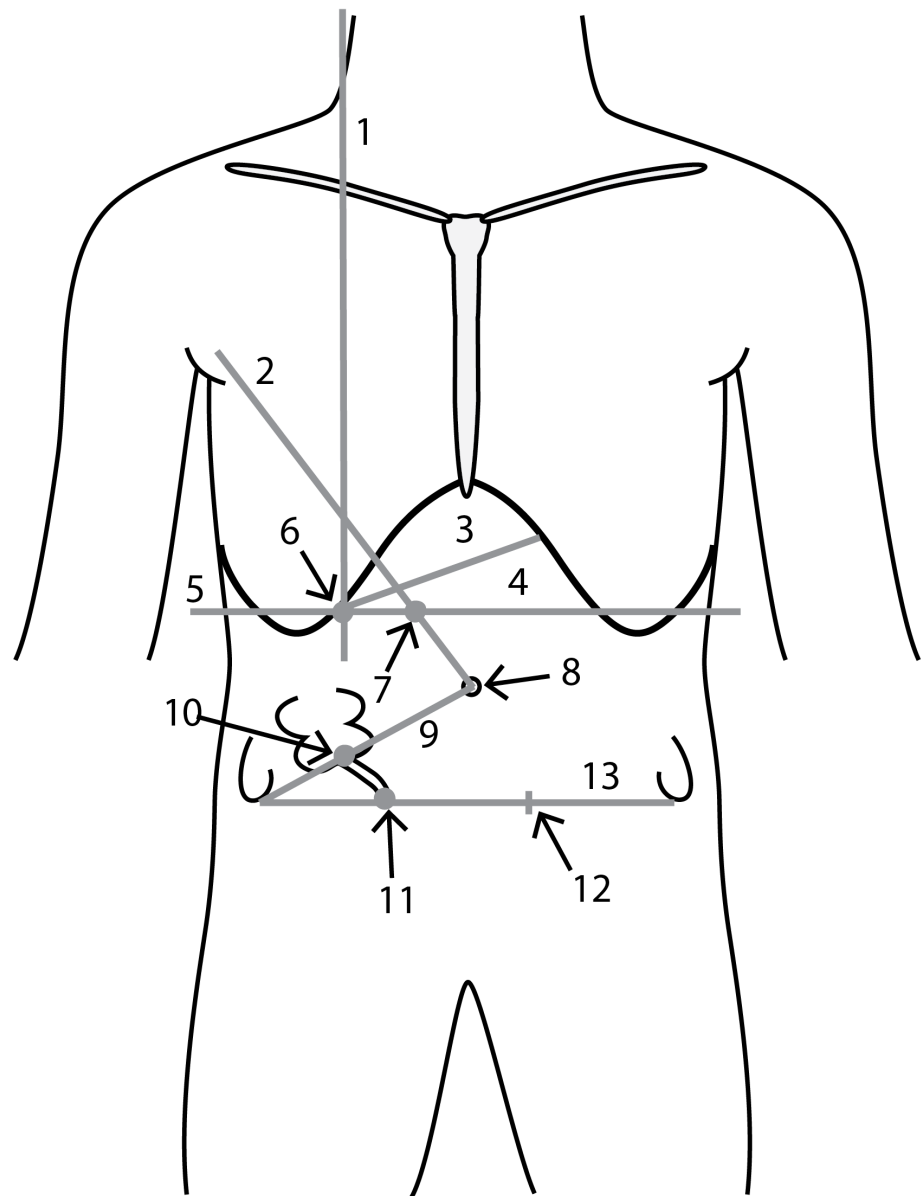


Fig. 6 Projection of organs onto the anterior abdominal wall

1. Midclavicular line
2. Umbilicoaxillary line
3. Projection of the liver
4. Triangle of Labbé – projection of the stomach
5. Transpyloric line
6. Murphy's point – projection of the fundus of gallbladder
7. Desjardin's point – projection of the Vater's papilla
8. Umbilicus
9. Spinoumbilical line (Monro)
10. MacBurney's point – projection of the origin of appendix
11. Right Lanz' point – projection of the appendix in pelvic position + middle constriction of the right ureter
12. Left Lanz' point – projection of the middle constriction of the left ureter
13. Interspinous line

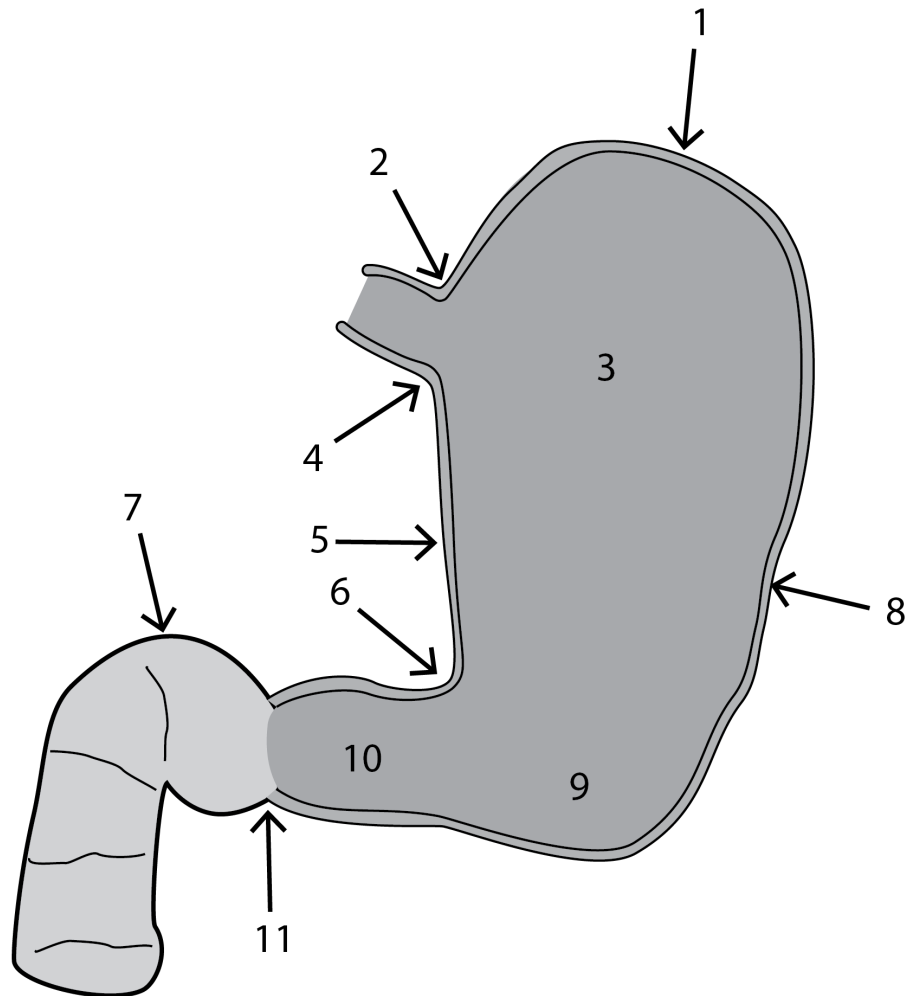


Fig. 7 Stomach

1. Fundus
2. Cardial notch
3. Gastric canal (body)
4. Cardia
5. Lesser curvature
6. Angular incisure
7. Duodenal bulb
8. Greater curvature
9. Pyloric antrum
10. Pyloric canal
11. Pylorus

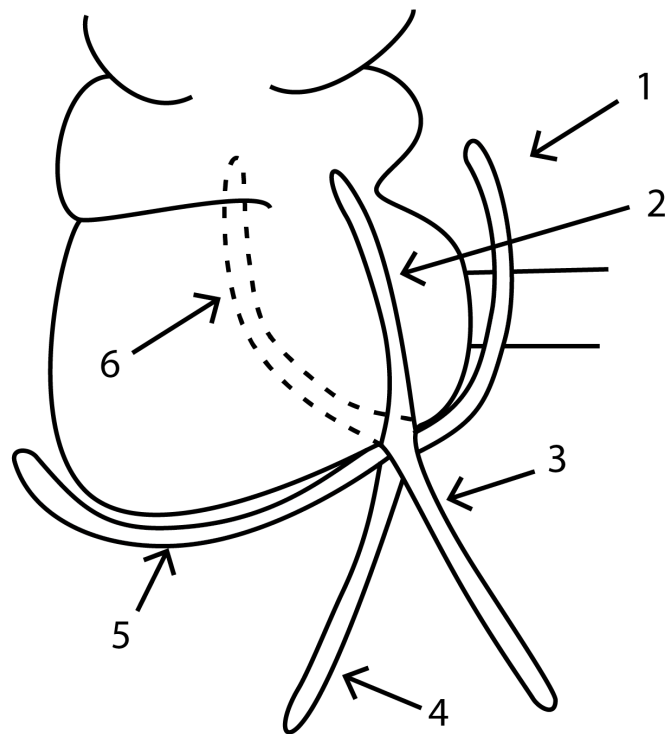


Fig. 8 Positions of the appendix

1. Ileocaecal position
2. Precaecal position
3. Pelvic position
4. Subcaecal position
5. Laterocaecal position
6. Retrocaecal position

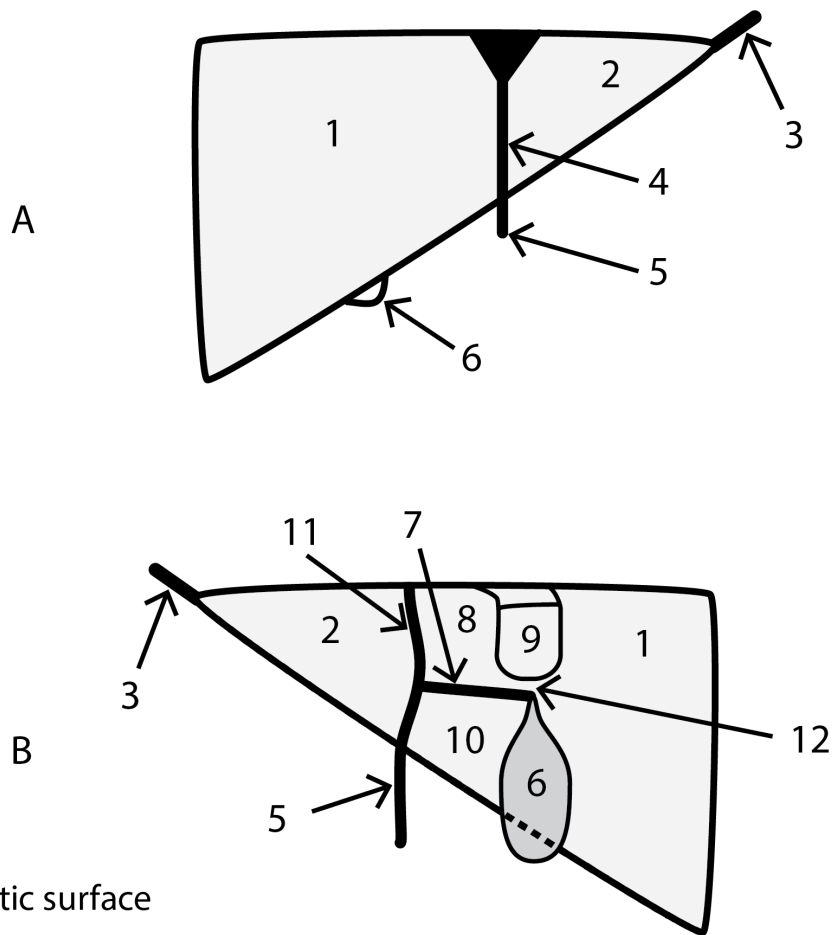


Fig. 9 Liver

A – Diaphragmatic surface

B – Visceral surface

1. Right lobe

2. Left lobe

3. Fibrous appendix of liver

4. Falciform ligament

5. Round ligament of liver

6. Gallbladder

7. Porta hepatis

8. Caudate lobe

9. Groove for vena cava

10. Quadrate lobe

11. Ligamentum venosum

12. Caudate process

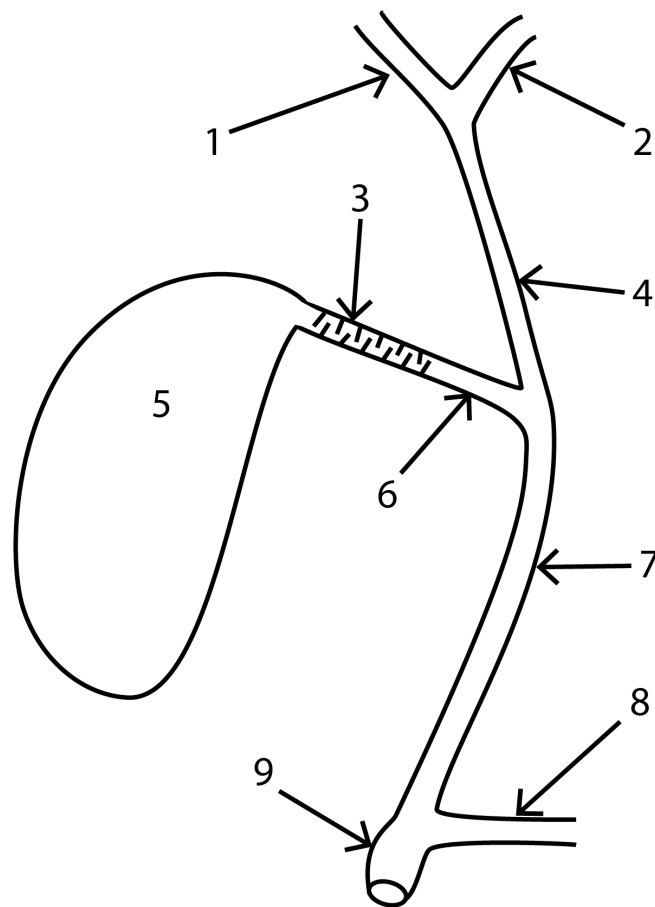


Fig. 10 Extrahepatic bile ducts with the gallbladder

1. Right hepatic duct
2. Left hepatic duct
3. Spiral fold
4. Common hepatic duct
5. Gallbladder
6. Cystic duct
7. Bile duct
8. Pancreatic duct
9. Hepatopancreatic ampulla

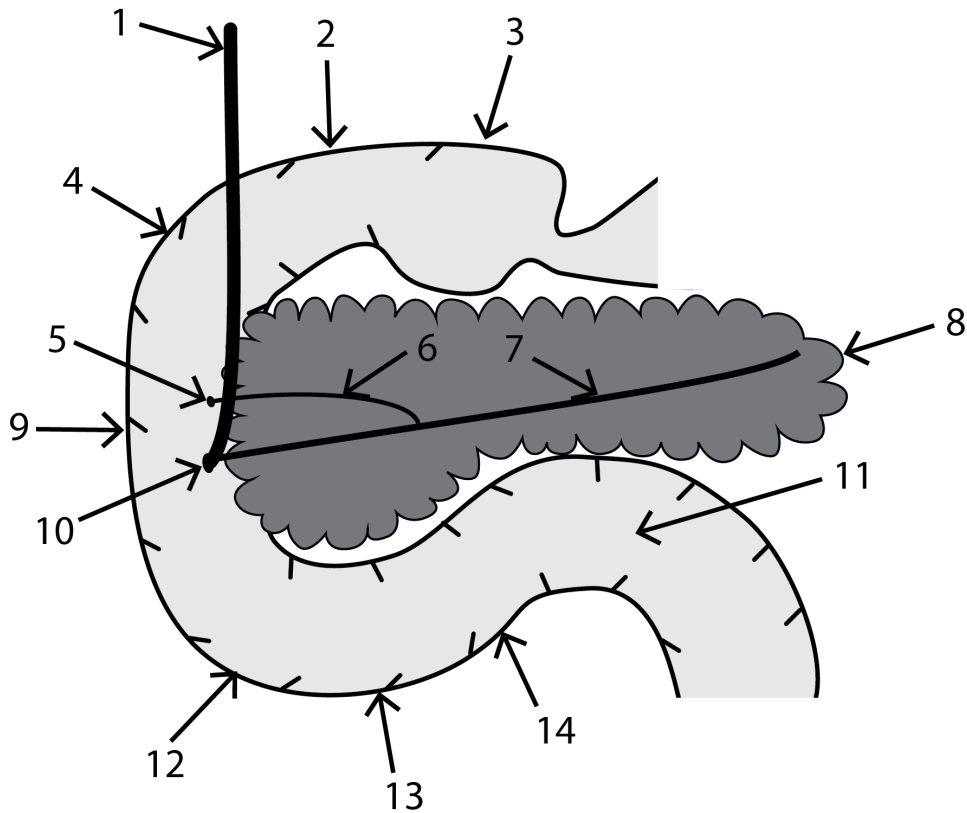


Fig. 11 Duodenum and pancreas

1. Bile duct
2. Superior part of duodenum
3. Duodenal bulb
4. Superior duodenal flexure
5. Minor duodenal papilla
6. Accessory pancreatic duct
7. Pancreatic duct
8. Pancreas
9. Descending part of duodenum
10. Major duodenal papilla (Vater)
11. Duodenojejunal flexure
12. Inferior duodenal flexure
13. Horizontal part of duodenum
14. Ascending part of duodenum

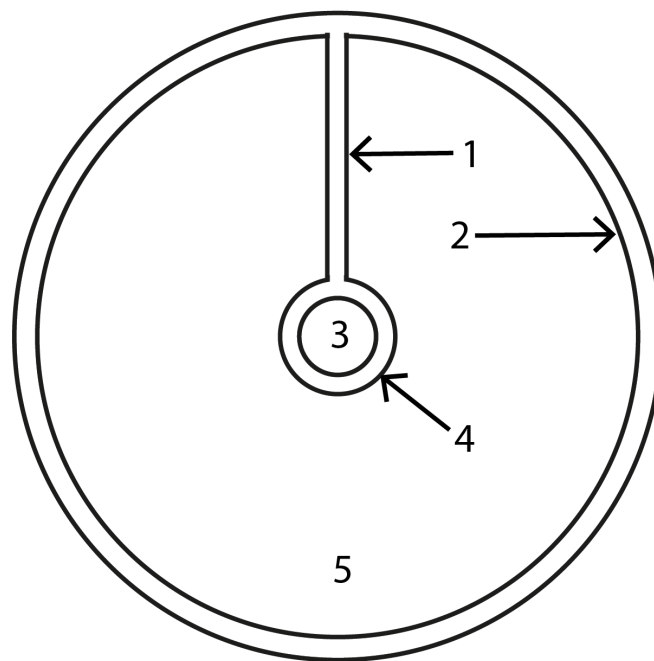


Fig. 12 Peritoneum

- 1. Mesentery
- 2. Parietal peritoneum
- 3. Digestive tube
- 4. Visceral peritoneum
- 5. Peritoneal cavity

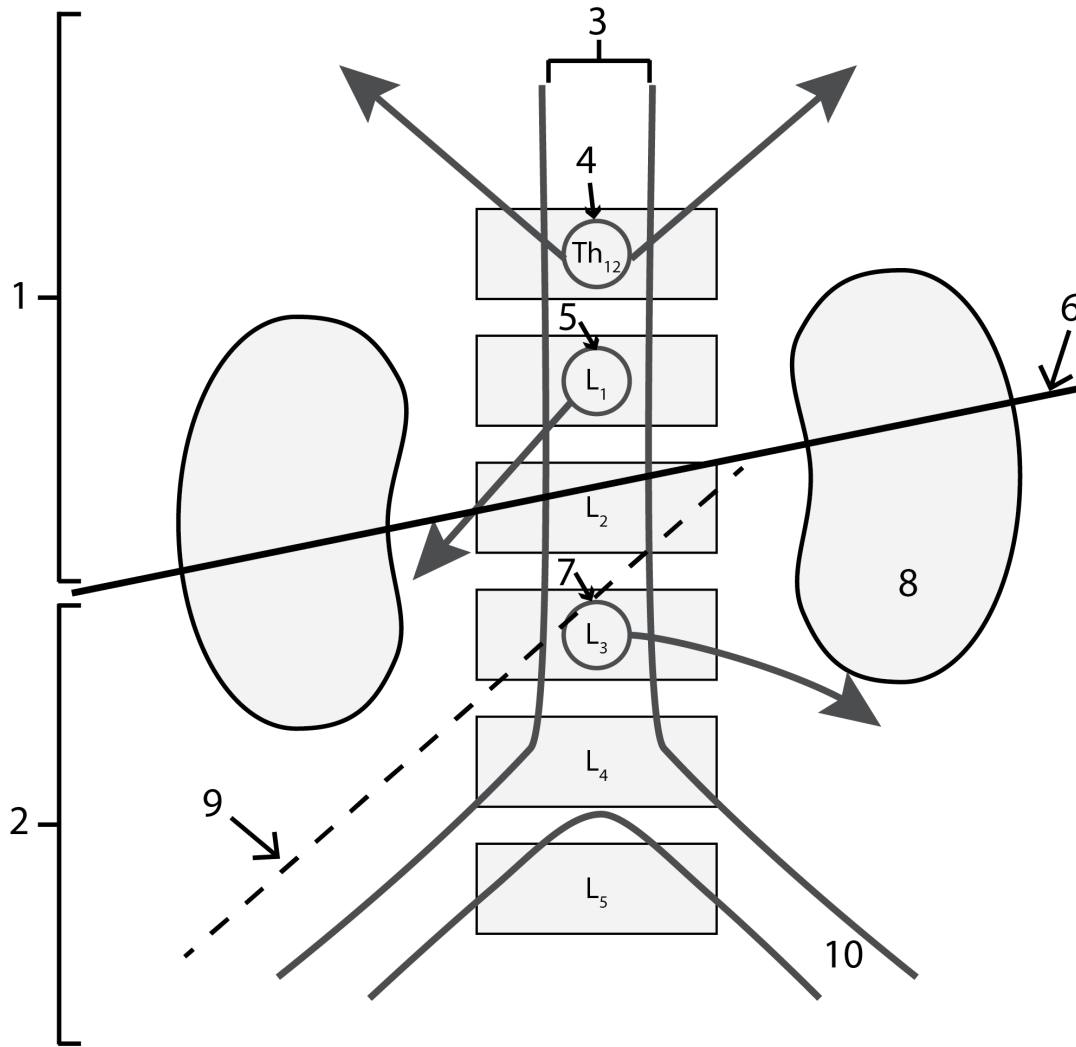


Fig. 13 Peritoneal cavity – blood supply

1. Supramesocolic part
2. Inframesocolic part
3. Aorta
4. Coeliac trunk
5. Superior mesenteric artery
6. Transverse mesocolon
7. Inferior mesenteric artery
8. Left kidney
9. Root of mesentery
10. Left common iliac artery

Big arrows indicate areas of blood supply

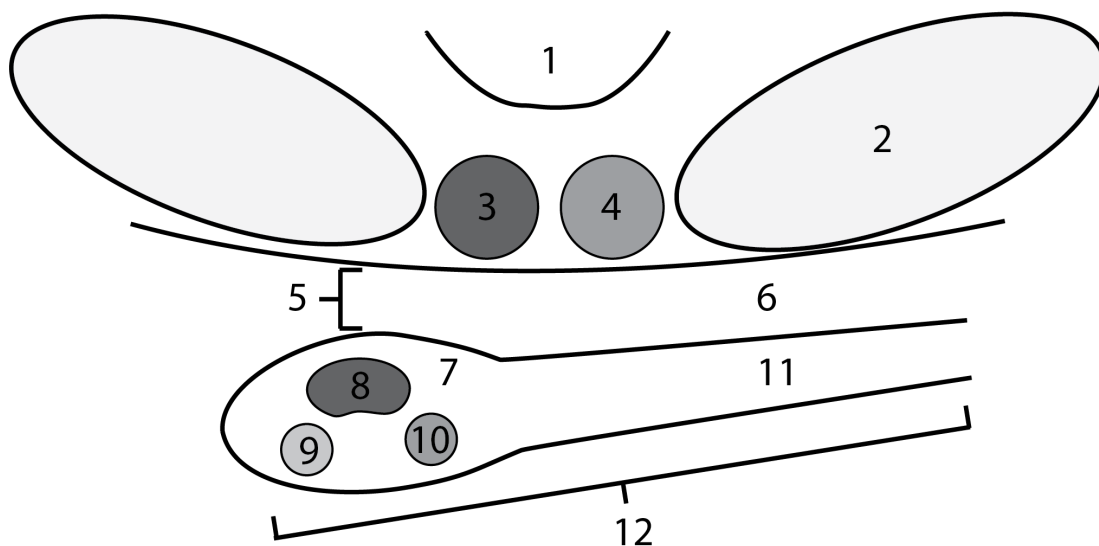


Fig. 14 Hepatoduodenal ligament (upper view)

1. Vertebral column
2. Left kidney
3. Inferior vena cava
4. Aorta
5. Omental opening
6. Omental bursa
7. Hepatoduodenal ligament
8. Hepatic portal vein
9. Ductus choledochus
10. Hepatic artery proper
11. Hepatogastric ligament
12. Lesser omentum

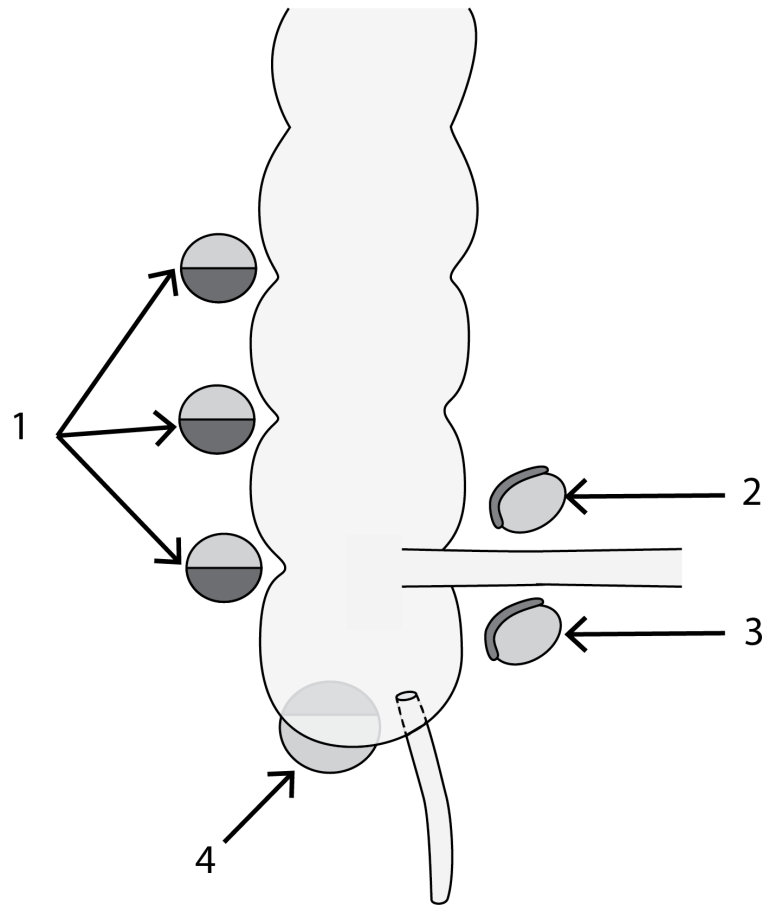


Fig. 15 Peritoneal recesses around caecum

- 1. Paracolic recesses
- 2. Superior ileocaecal recess
- 3. Inferior ileocaecal recess
- 4. Retrocaecal recess

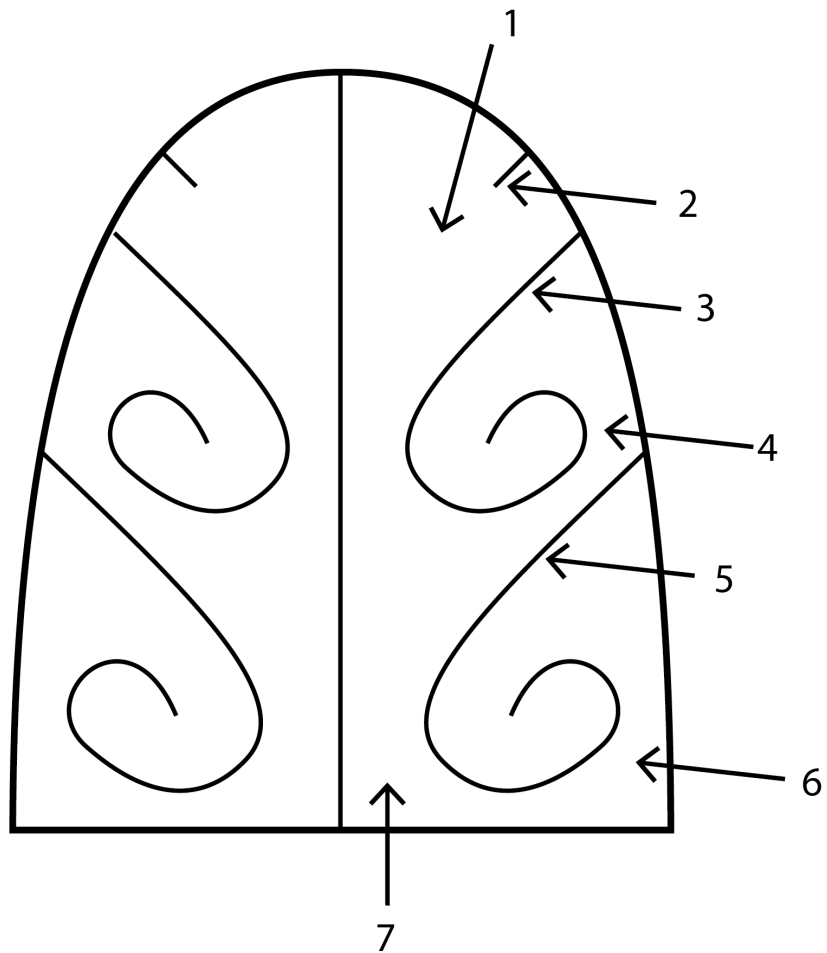


Fig. 16 Nasal cavity (coronal section)

1. Superior nasal meatus
2. Superior nasal concha
3. Middle nasal concha
4. Middle nasal meatus
5. Inferior nasal concha
6. Inferior nasal meatus
7. Common nasal meatus

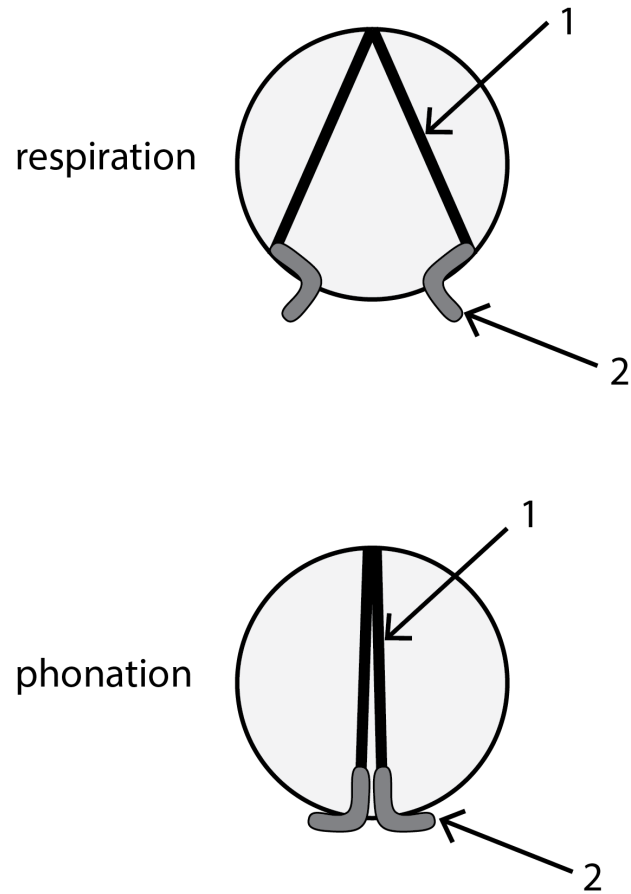


Fig. 17 Rima glottidis during respiration and fonation

1. Vocal fold

2. Arytenoid cartilage

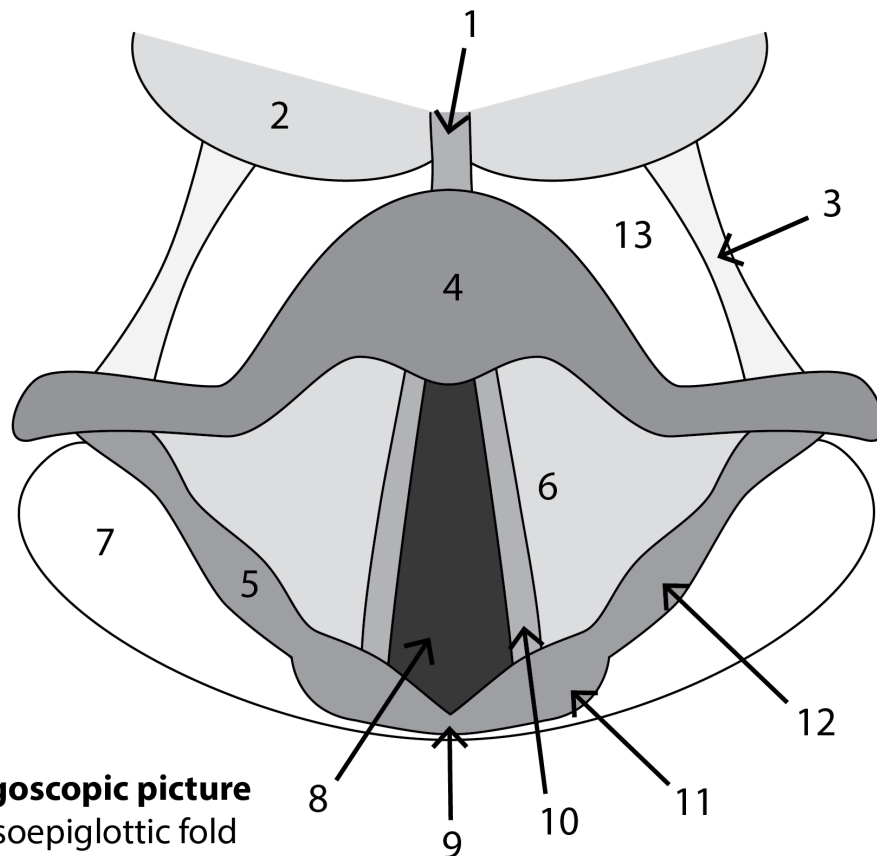


Fig. 18 Laryngoscopic picture

1. Median glossoepiglottic fold
2. Posterior part of tongue
3. Lateral glossoepiglottic fold
4. Epiglottis
5. Aryepiglottic fold
6. Vestibular fold
7. Piriform recess
8. Rima glottidis
9. Interarytenoid notch
10. Vocal fold
11. Corniculate tubercle
12. Cuneiform tubercle
13. Epiglottic vallecula

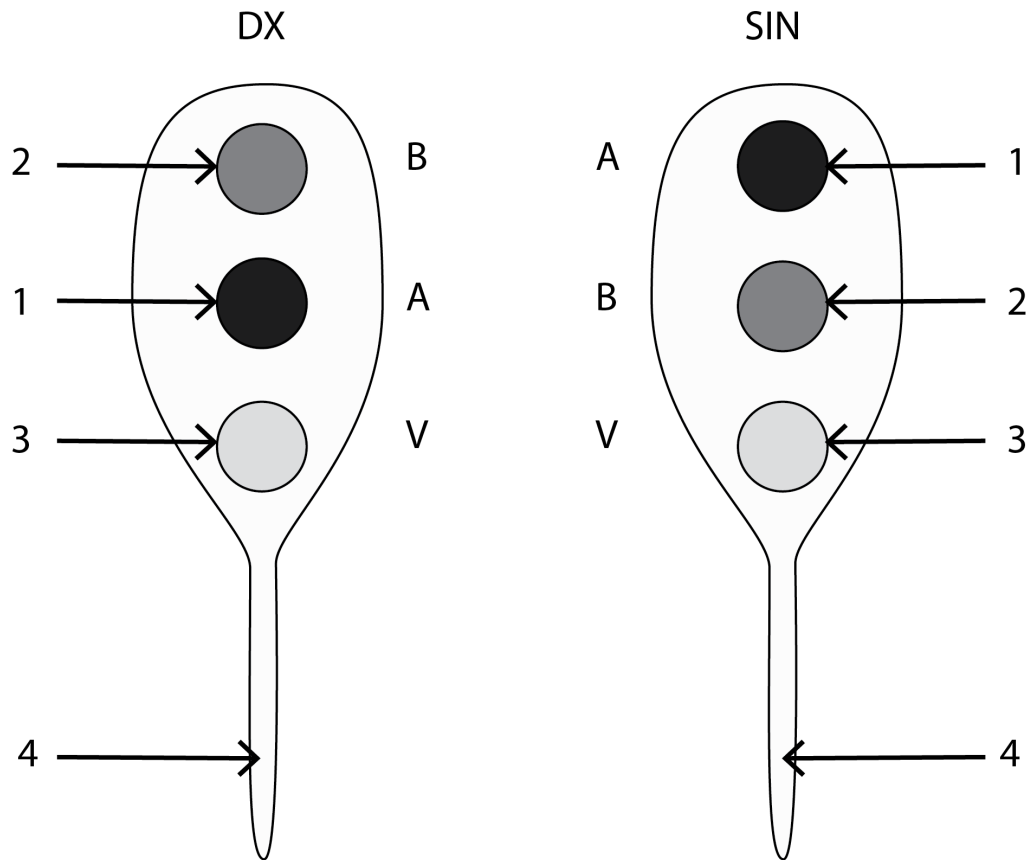


Fig. 19 Right and left pulmonary root

1. Pulmonary artery
2. Principal bronchus
3. Pulmonary veins
4. Pulmonary ligament

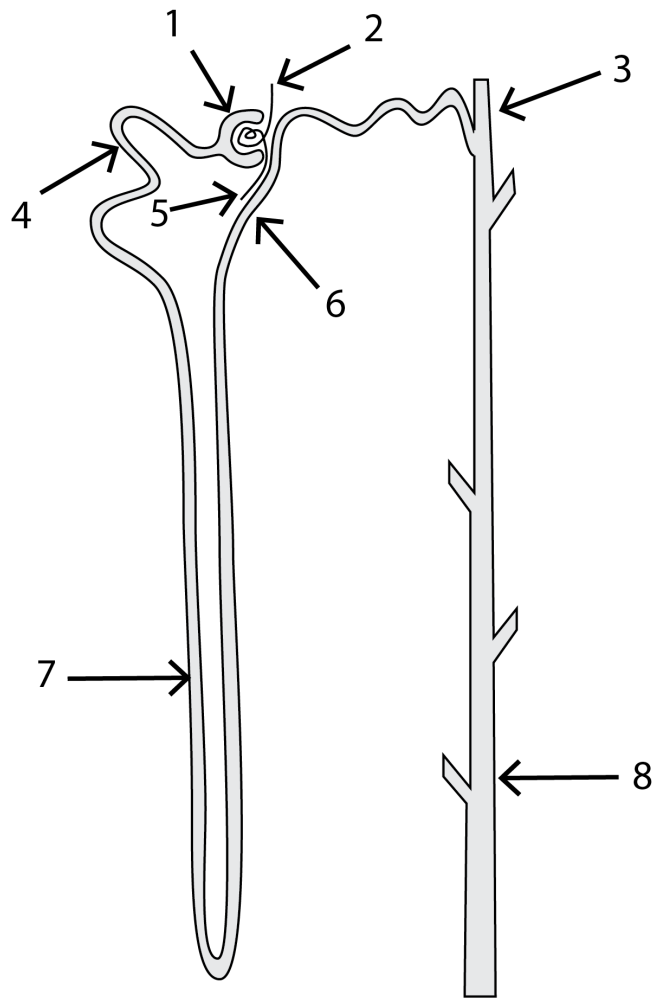


Fig. 20 Nephron

1. Bowman's capsule
2. Afferent glomerular arteriole
3. Collecting tubule
4. Proximal tubule
5. Efferent glomerular arteriole
6. Distal tubule
7. Henle's loop
8. Papillary duct

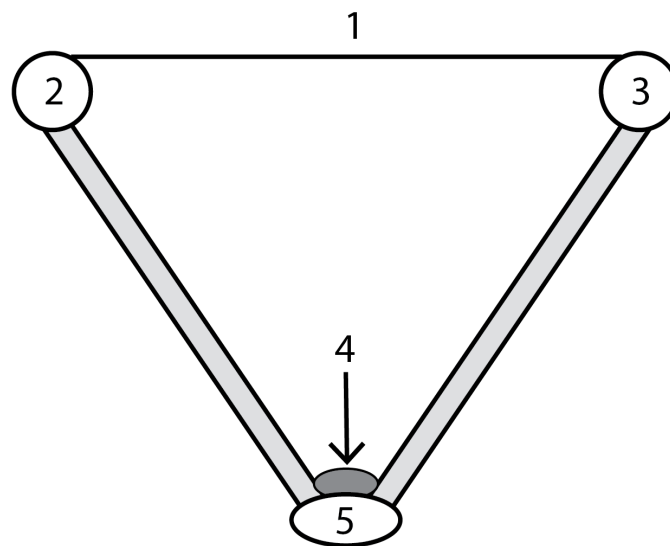


Fig. 21 Trigone of urinary bladder

1. Interureteric crest
2. Right ureteric orifice
3. Left ureteric orifice
4. Uvula of bladder
5. Internal urethral orifice

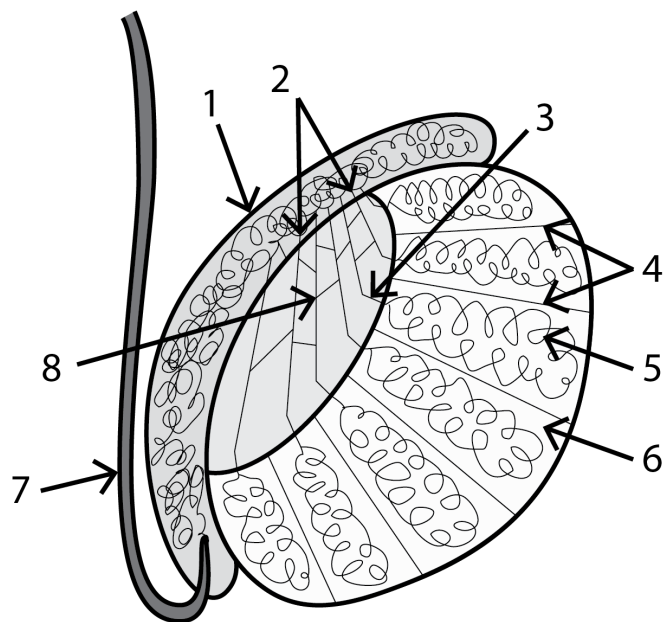


Fig. 22 Testis (sagittal section)

1. Epididymis
2. Efferent ductules
3. Straight tubule
4. Septa testis
5. Seminiferous tubule
6. Lobule of testis
7. Ductus deferens
8. Rete testis

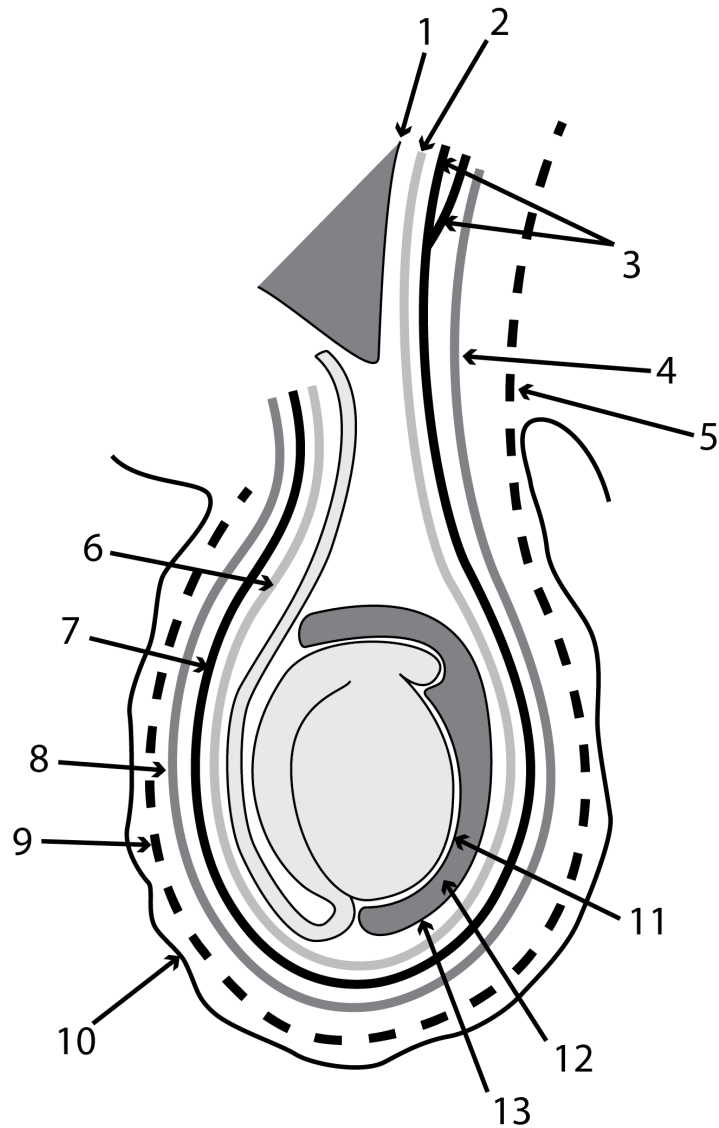


Fig. 23 Coverings of the testis and epididymis

1. Parietal peritoneum
2. Transversalis fascia
3. Transversus and internal oblique abdominal muscles
4. Fascia of external oblique muscle
5. Investing fascia of abdomen
6. Internal spermatic fascia
7. Cremasteric fascia with cremaster muscle
8. External spermatic fascia
9. Dartos fascia
10. Skin
11. Visceral layer of tunica vaginalis
12. Cavum serosum scroti
13. Parietal layer of tunica vaginalis

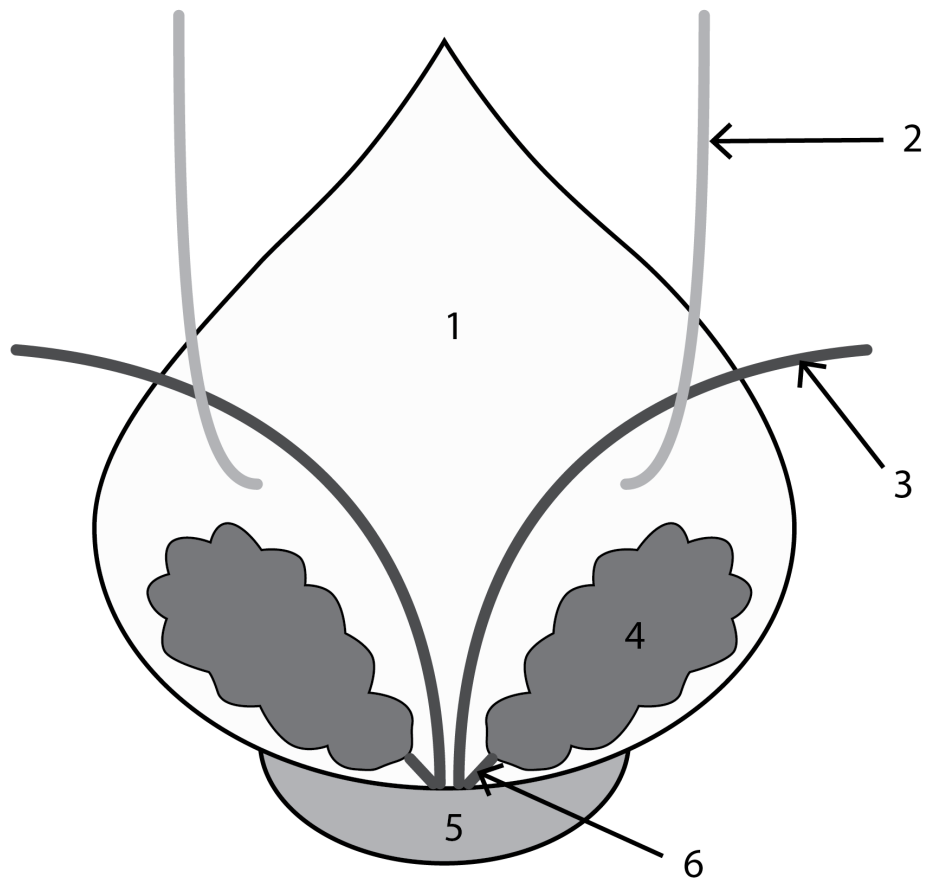


Fig. 24 Ductus deferentes and seminal glands (posterior view)

1. Urinary bladder
2. Ureter
3. Ductus deferens
4. Seminal vesicle
5. Prostate
6. Excretory duct

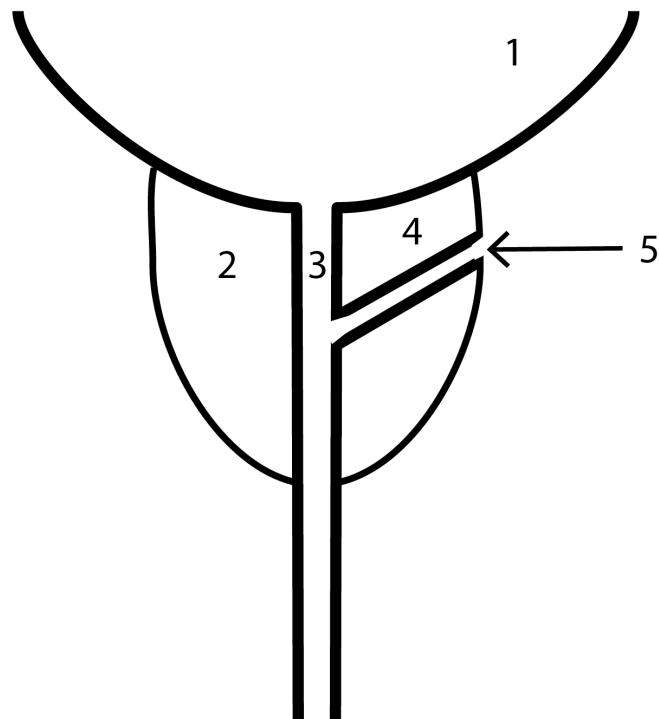


Fig. 25 Prostate (sagittal section)

1. Urinary bladder
2. Prostate
3. Urethra
4. Middle lobe
5. Ejaculatory duct

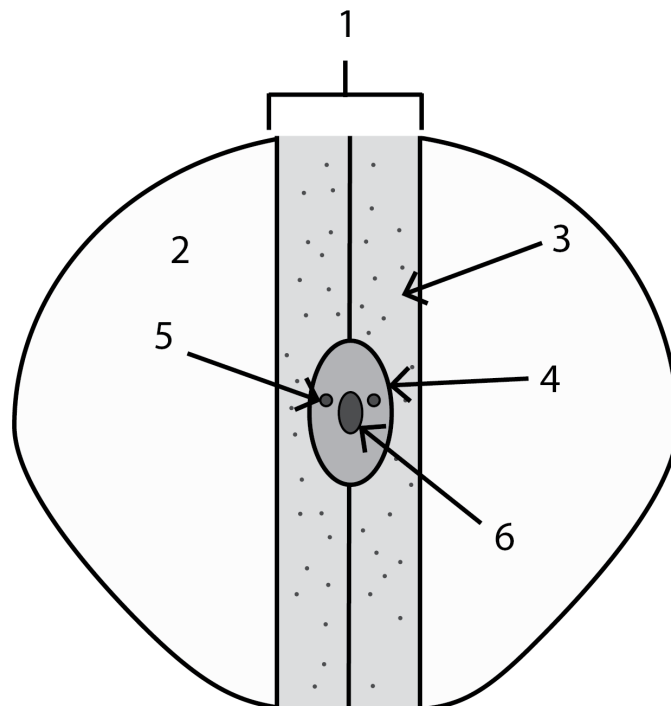


Fig. 26 Prostatic urethra

1. Prostatic urethra
2. Prostate
3. Prostatic sinus
4. Seminal colliculus
5. Opening of the ejaculatory duct
6. Prostatic utricle

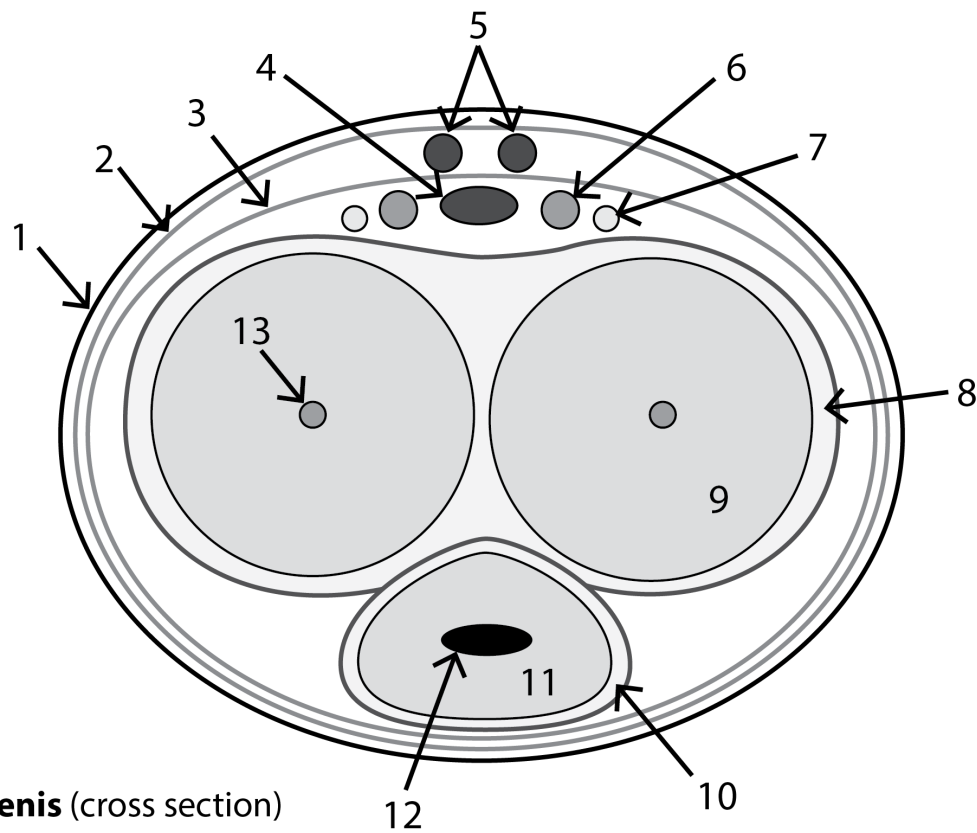


Fig. 27 Penis (cross section)

1. Skin
2. Superficial fascia of penis
3. Deep fascia of penis
4. Deep dorsal vein of penis
5. Superficial dorsal veins of penis
6. Dorsal artery of penis
7. Dorsal nerve of penis
8. Tunica albuginea of corpora cavernosa
9. Corpus cavernosum
10. Tunica albuginea of corpus spongiosum
11. Corpus spongiosum penis
12. Spongy urethra
13. Deep artery of penis

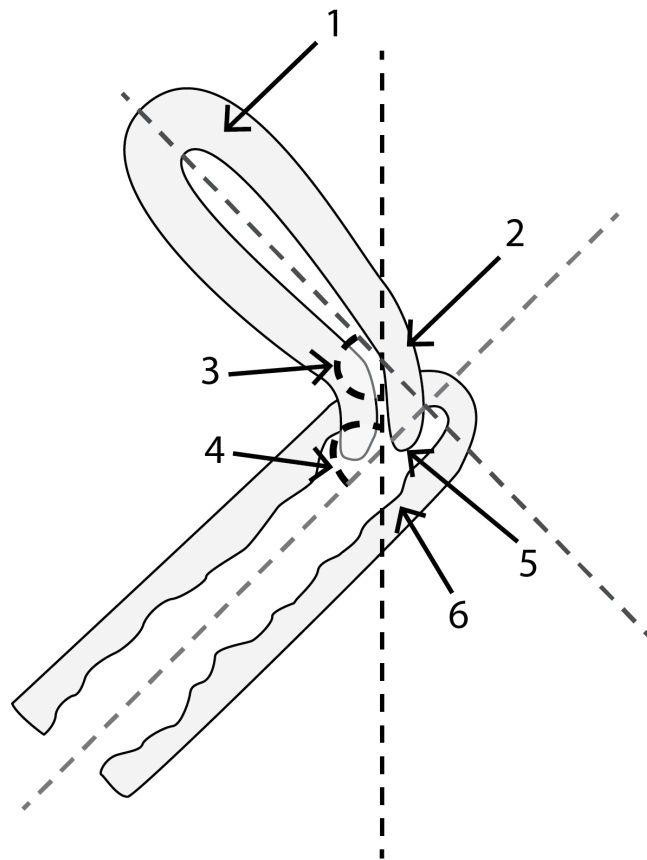


Fig. 28 Uterus – anteversion, anteflexion

- 1. Body of uterus
- 2. Isthmus of uterus
- 3. Anteflexion
- 4. Anteversion
- 5. Cervix of uterus
- 6. Vagina
- Long axis

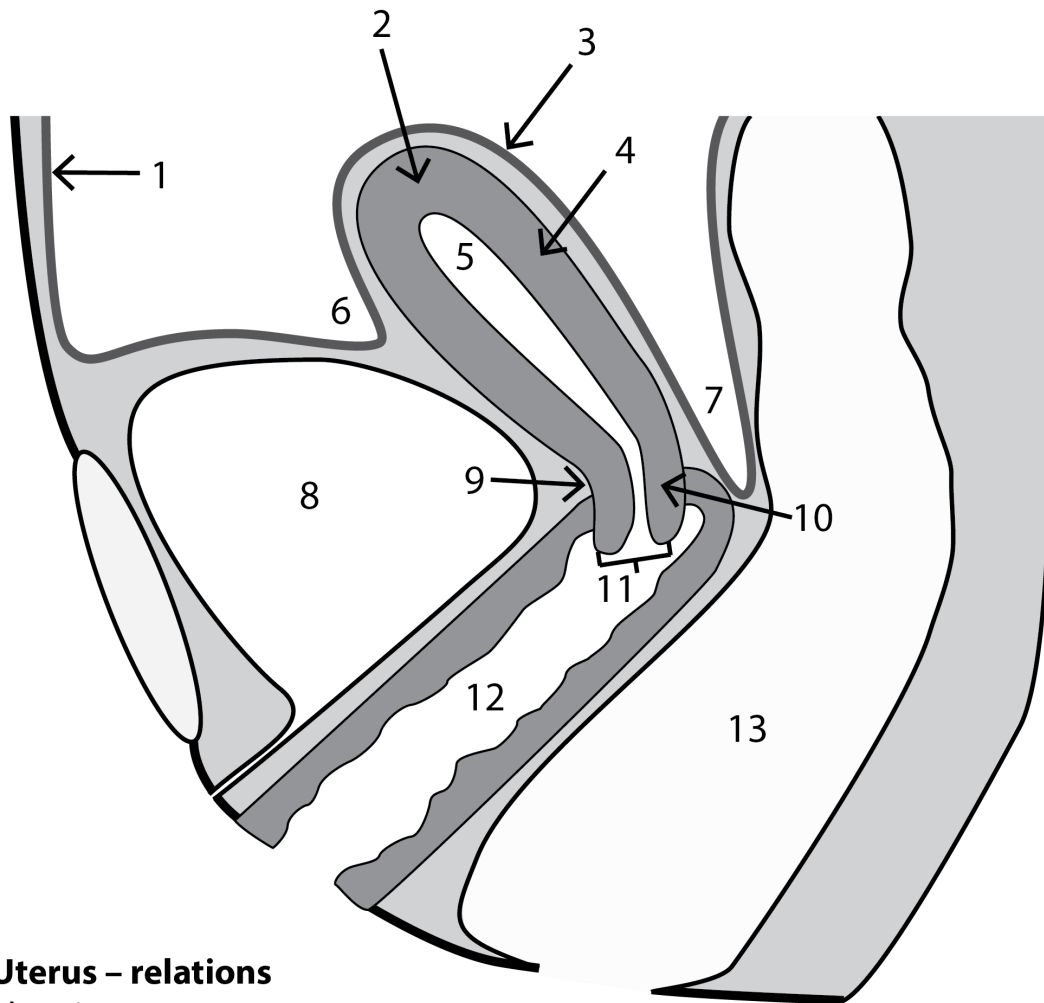


Fig. 29 Uterus – relations

1. Parietal peritoneum
2. Fundus of uterus
3. Perimetrium
4. Corpus of uterus
5. Uterine cavity
6. Vesico-uterine pouch
7. Recto-uterine pouch (Douglas)
8. Urinary bladder
9. Isthmus of uterus
10. Cervix of uterus
11. Vaginal part of the cervix
12. Vagina
13. Rectum

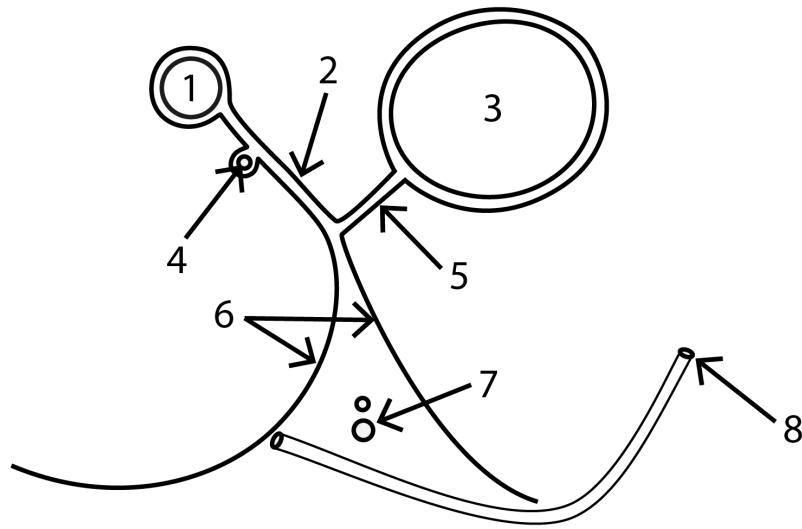


Fig. 30 Broad ligament of uterus (sagittal section)

1. Uterine tube
2. Mesosalpinx
3. Ovary
4. Round ligament of uterus
5. Mesovarium
6. Broad ligament of uterus
7. Uterine vessels
8. Ureter

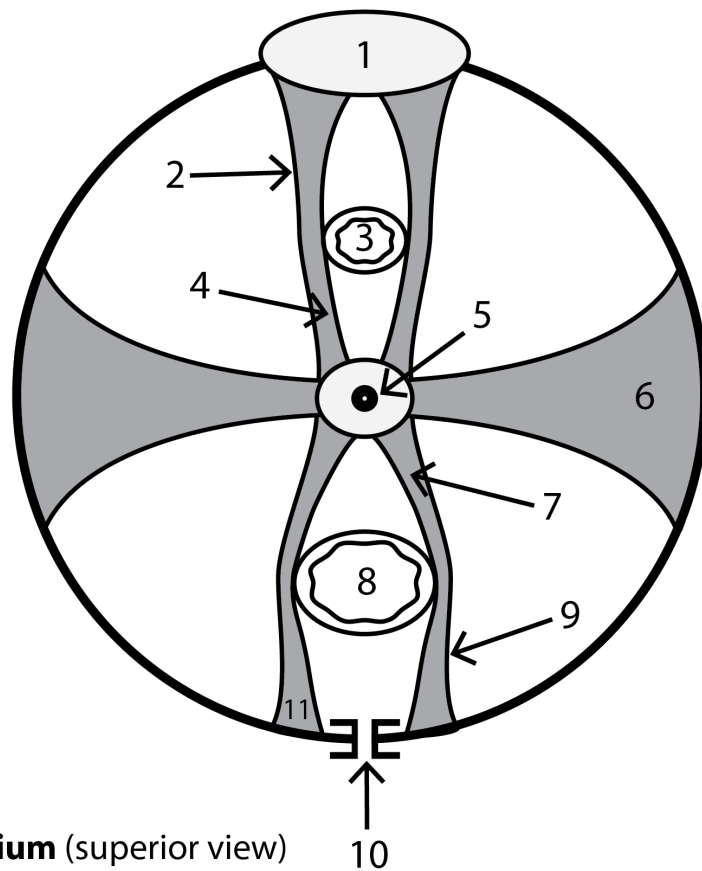


Fig. 31 Parametrium (superior view)

1. Sacrum
2. Sacrouterine ligament
3. Rectum
4. Rectouterine ligament
5. Cervix of uterus
6. Cardinal ligament
7. Vesicouterine ligament
8. Urinary bladder
9. Pubovesical ligament
10. Pubic symphysis
11. Pubocervical ligament

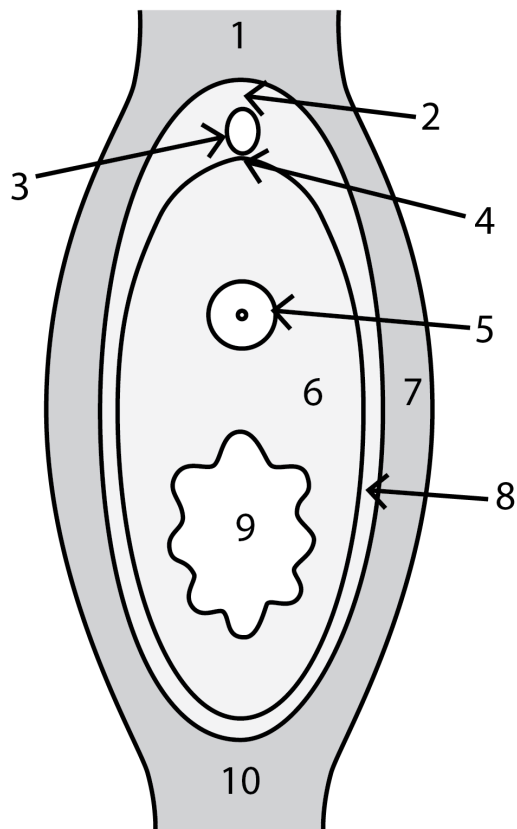


Fig. 32 Female external genital organs (vulva)

1. Anterior commissure
2. Prepuce of clitoris
3. Clitoris
4. Frenulum of clitoris
5. External urethral orifice
6. Vestibule
7. Labium majus
8. Labium minus
9. Vaginal orifice
10. Posterior commissure

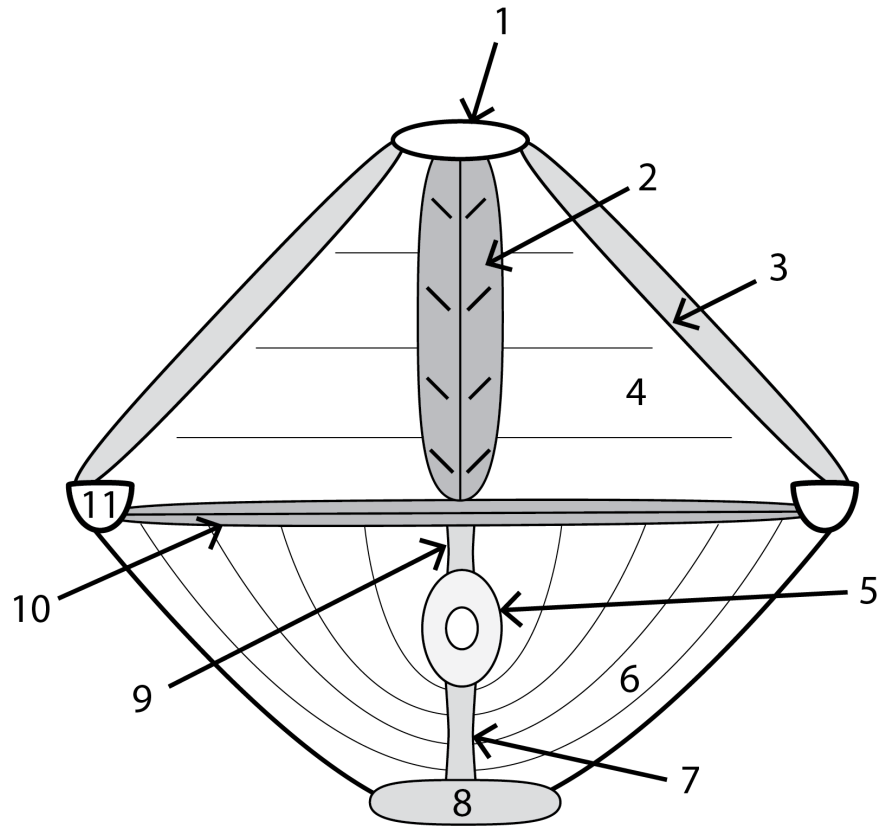


Fig. 33 Male perineum (inferior view)

1. Pubic symphysis
2. Bulbospongiosus
3. Ischiocavernosus
4. Perineal membrane
5. External anal sphincter
6. Levator ani
7. Anococcygeal ligament
8. Sacrum and coccyx
9. Perineal body
10. Superficial transverse perineal muscle
11. Ischial tuberosity

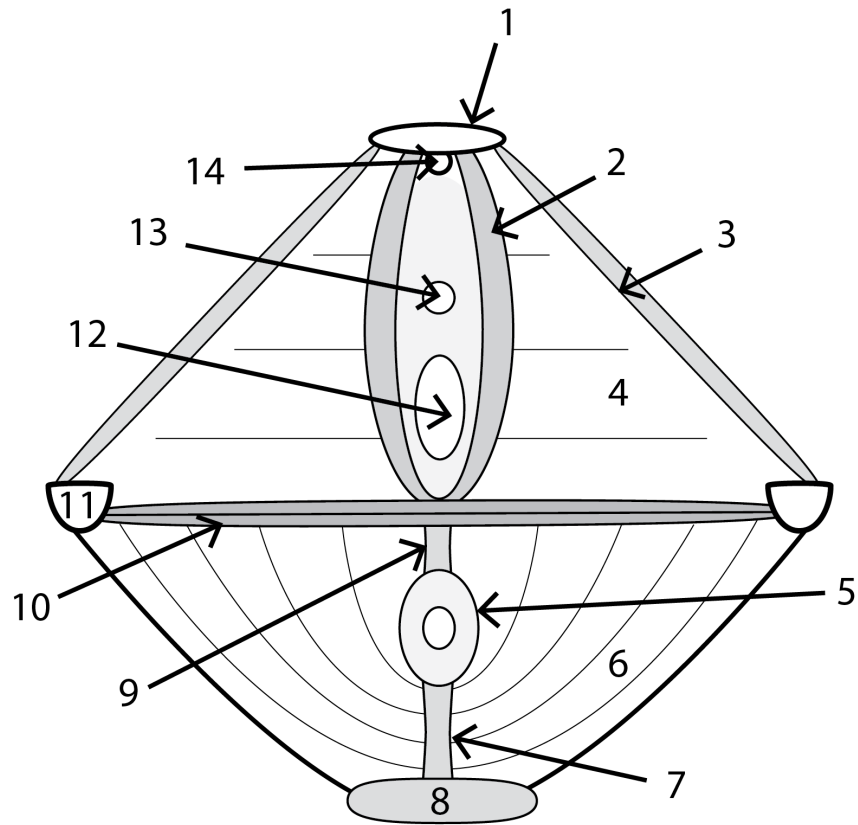


Fig. 34 Female perineum (inferior view)

1. Pubic symphysis
2. Bulbospongiosus
3. Ischiocavernosus
4. Perineal membrane
5. External anal sphincter
6. Levator ani
7. Anococcygeal ligament
8. Sacrum and coccyx
9. Perineal body
10. Superficial transverse perineal muscle
11. Ischial tuberosity
12. Vaginal orifice
13. External urethral orifice
14. Glans of clitoris

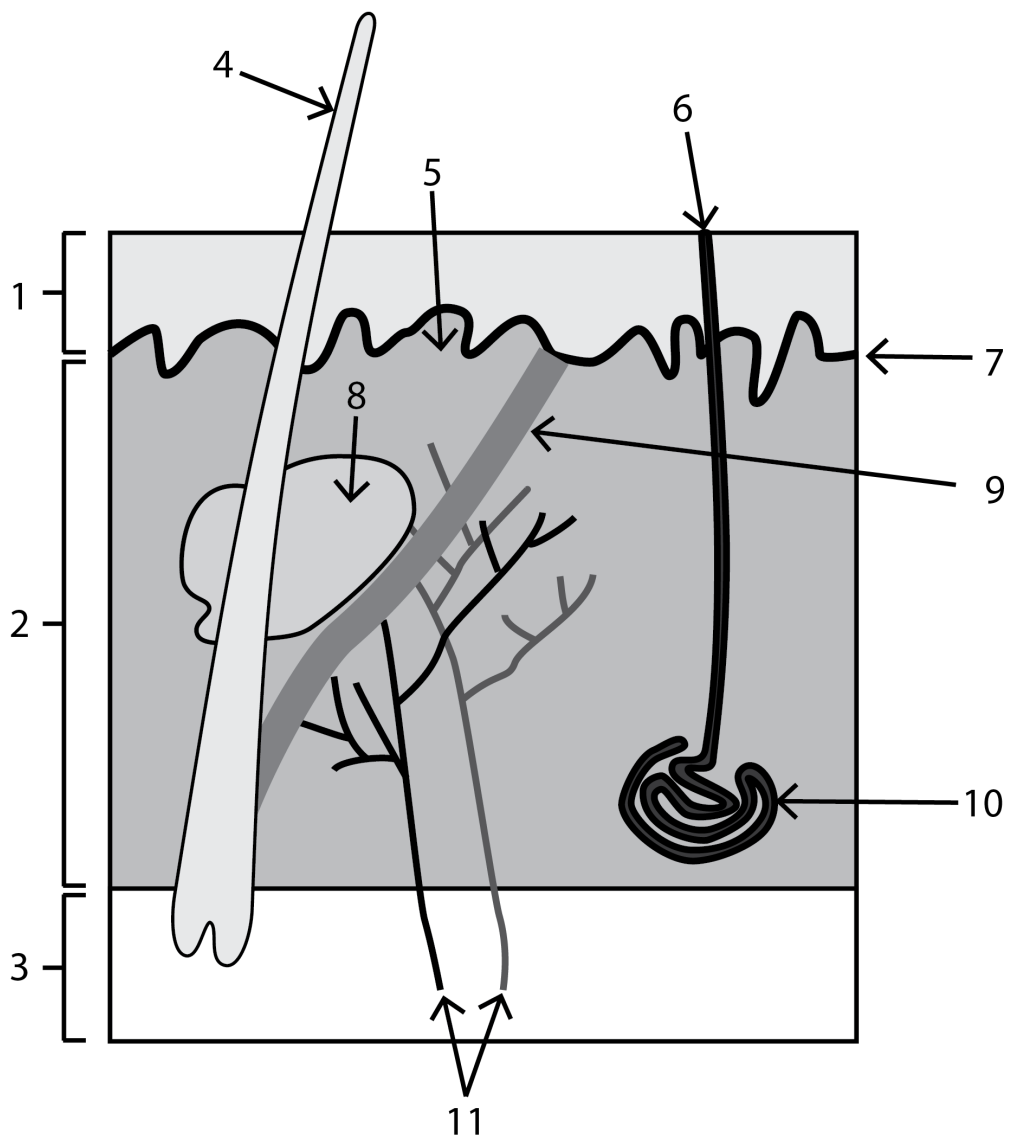


Fig. 35 Structure of the skin

1. Epidermis
2. Dermis
3. Subcutaneous tissue
4. Hair
5. Dermal papilla
6. Opening of sweat duct
7. Dermo-epidermal junction
8. Sebaceous gland
9. Arrector muscle of hair
10. Sweat gland
11. Vessels

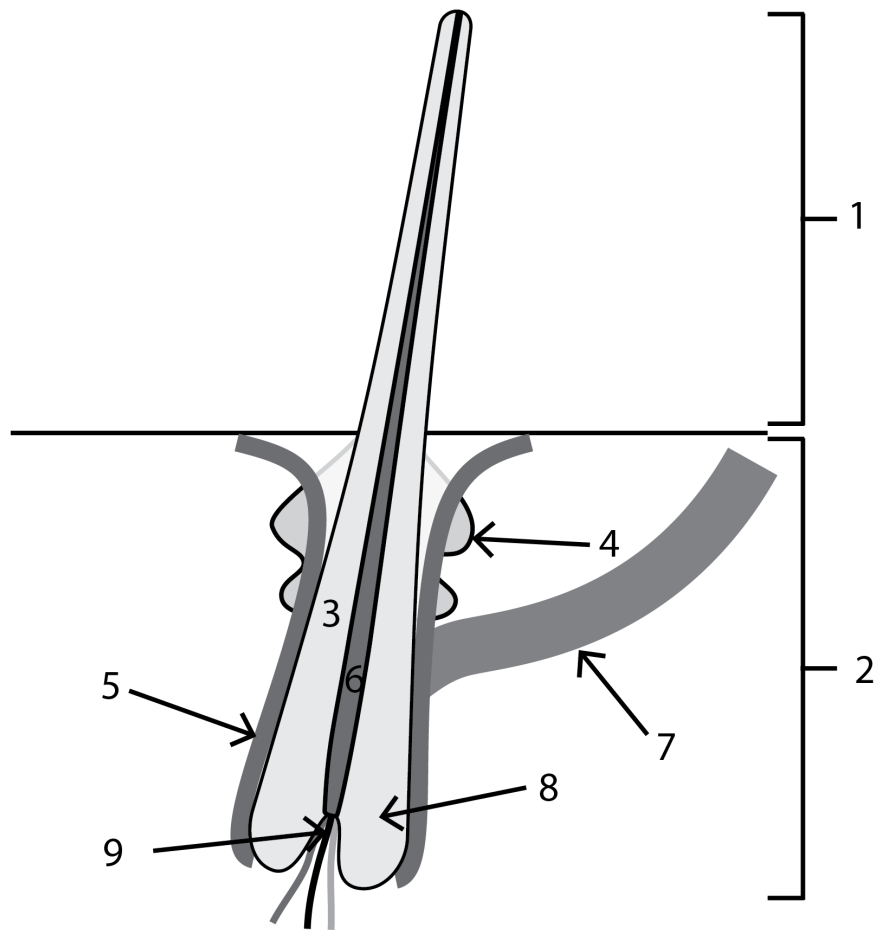


Fig. 36 Structure of the hair

1. Shaft of hair
2. Root of hair
3. Cortex of hair
4. Sebaceous gland
5. Hair follicle
6. Medulla of hair
7. Arrector muscle of hair
8. Hair bulb
9. Hair papilla

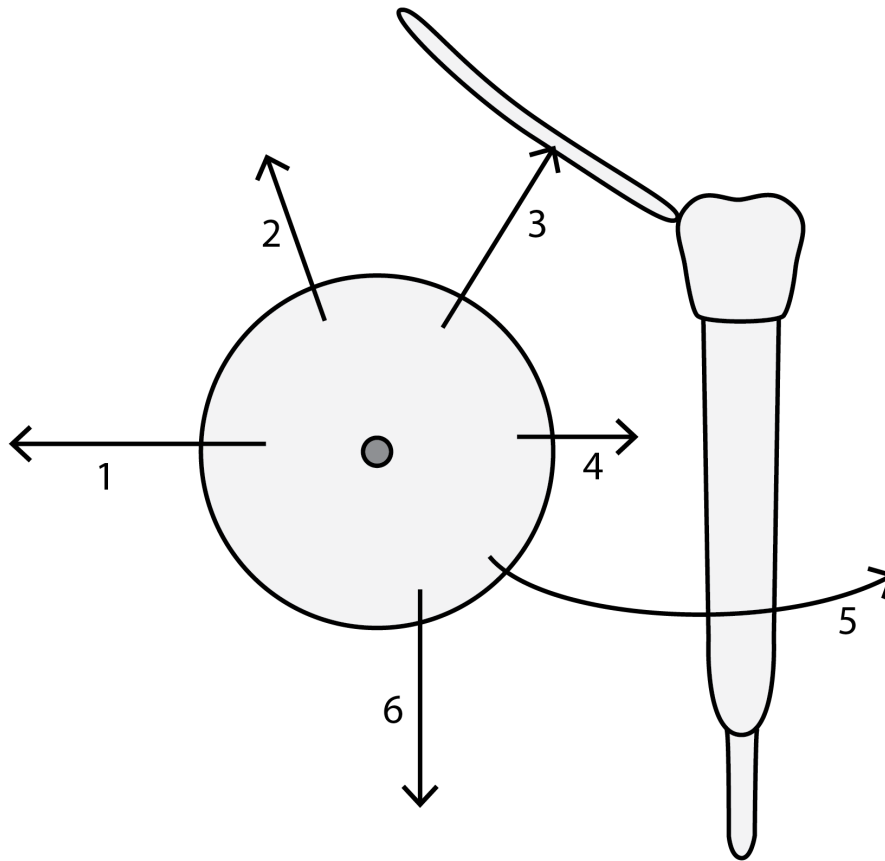


Fig. 37 Lymphatic drainage of the breast

1. To axillary lymph nodes
2. To infraclavicular nodes
3. To supraclavicular nodes
4. To parasternal nodes
5. Connections to the lymphatic system of the contralateral breast
6. Epigastric pathway

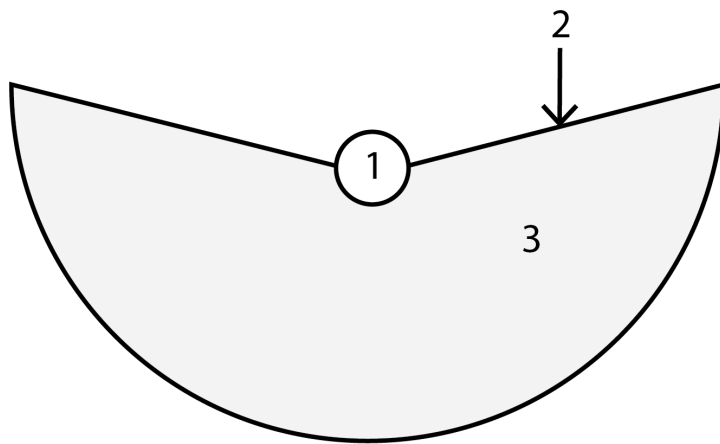


Fig. 38 Shape of the semilunar cusp

- 1. Nodule
- 2. Lunule
- 3. Semilunar cusp

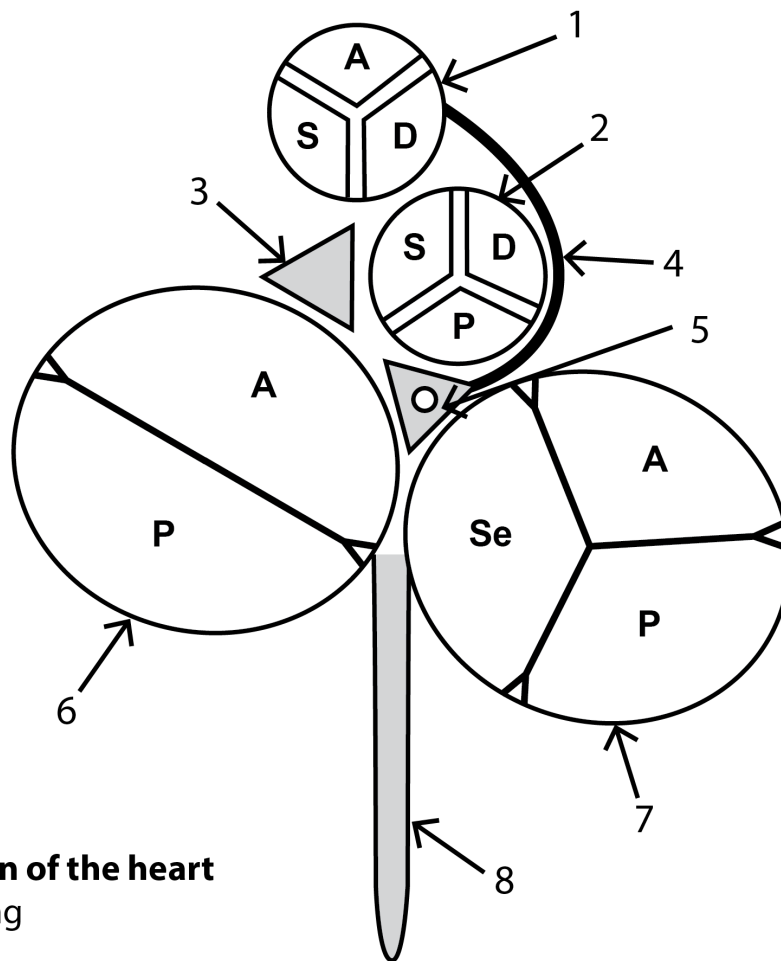


Fig. 39 Skeleton of the heart

1. Pulmonary ring
 2. Aortic ring
 3. Left fibrous trigone
 4. Tendon of infundibulum
 5. Right fibrous trigone
 6. Left fibrous ring
 7. Right fibrous ring
 8. Membranous part of interventricular septum
- A – anterior cusp
P – posterior cusp
D – right cusp
S – left cusp
Se – septal cusp

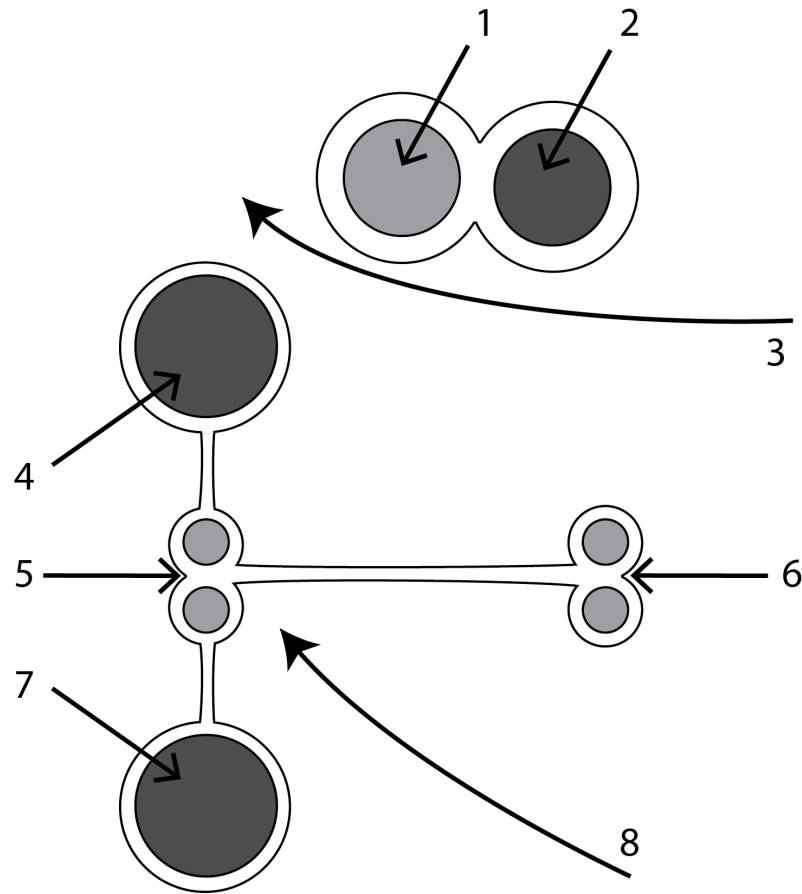


Fig. 40 Serous pericardium – perivascular reflexions

(porta arteriarum et venarum)

1. Aorta
2. Pulmonary trunk
3. Transverse sinus
4. Superior vena cava
5. Right pulmonary veins
6. Left pulmonary veins
7. Inferior vena cava
8. Oblique sinus

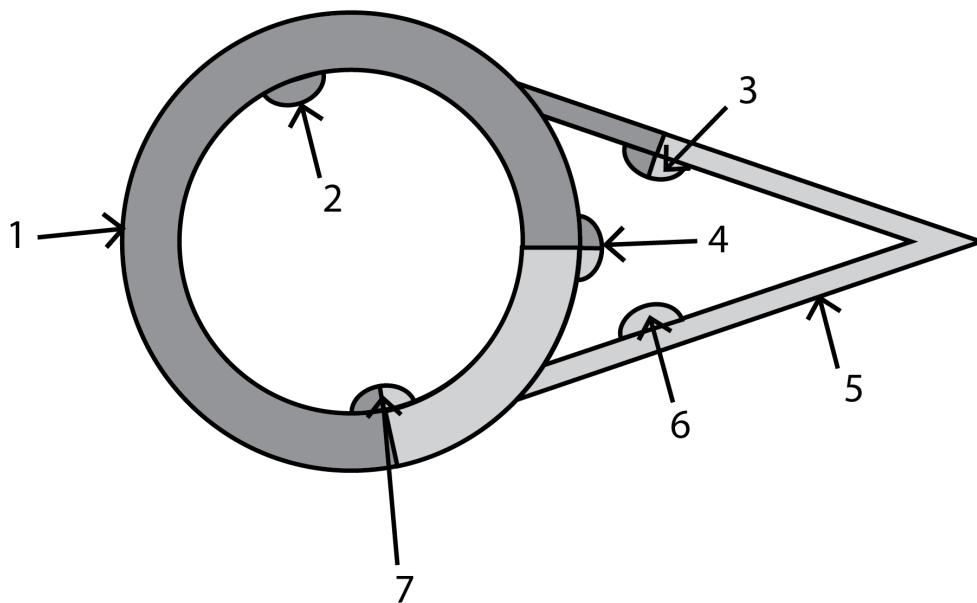


Fig. 41 Ventricles of the heart – blood supply (cross section)

1. Left ventricle
 2. Anterior papillary muscle of left ventricle
 3. Anterior papillary muscle of right ventricle
 4. Septal papillary muscles of right ventricle
 5. Right ventricle
 6. Posterior papillary muscle of right ventricle
 7. Posterior papillary muscle of left ventricle
- (dark areas – supplied from the left coronary artery,
light areas – supplied from the right coronary artery)

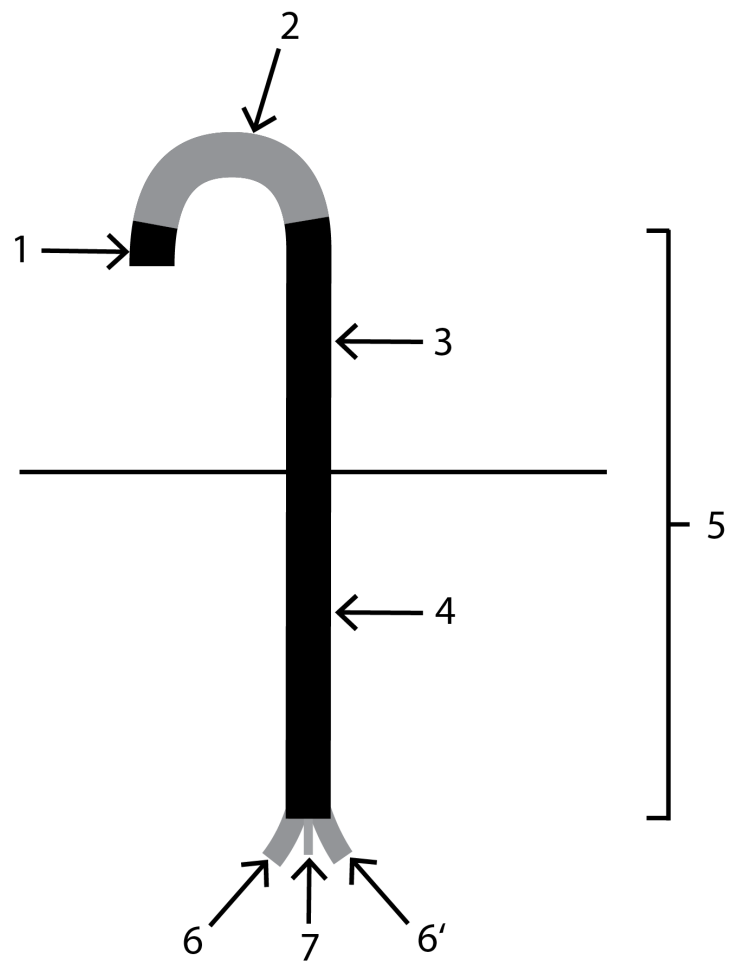
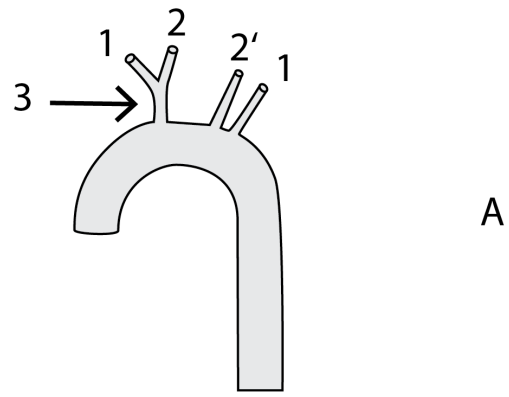
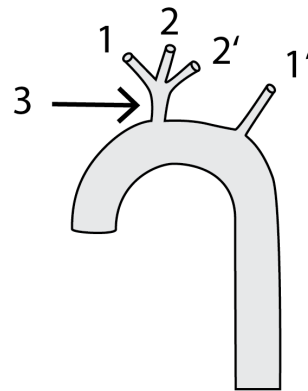


Fig 42 Aortic segments

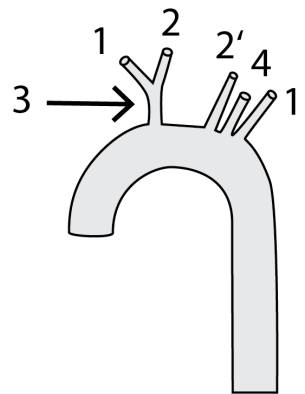
1. Ascending aorta
2. Aortic arch
3. Thoracic aorta
4. Abdominal aorta
5. Descending aorta
6. Right common iliac artery
- 6'. Left common iliac artery
7. Median sacral artery



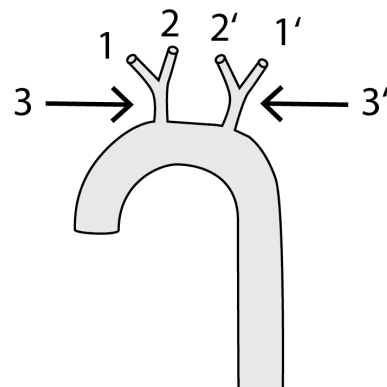
A



B



C



D

Fig. 43 Variability of the aortic arch

A – the most common case

B – D variations

1. Right subclavian artery

1'. Left subclavian artery

2. Right common carotid artery

2'. Left common carotid artery

3. Brachiocephalic trunk

3'. Left brachiocephalic trunk

4. Left vertebral artery

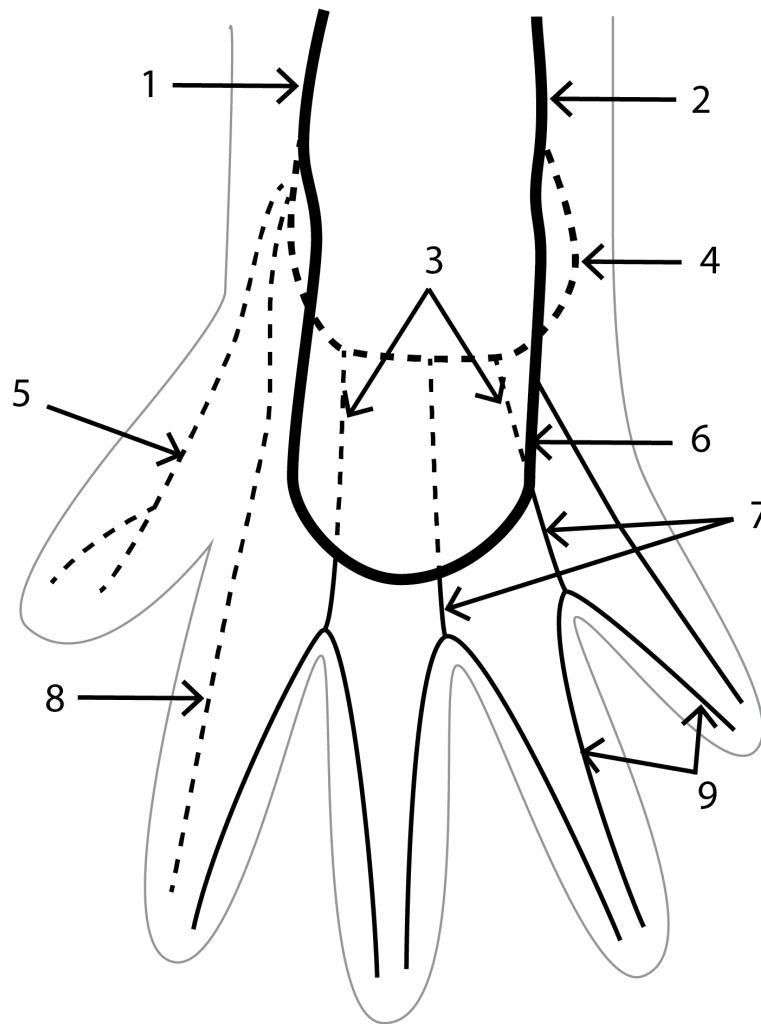


Fig. 44 Superficial and deep palmar arches

1. Radial artery
2. Ulnar artery
3. Palmar metacarpal arteries
4. Deep palmar arch
5. Princeps pollicis artery
6. Superficial palmar arch
7. Common palmar digital arteries
8. Radialis indicis artery
9. Proper palmar digital arteries

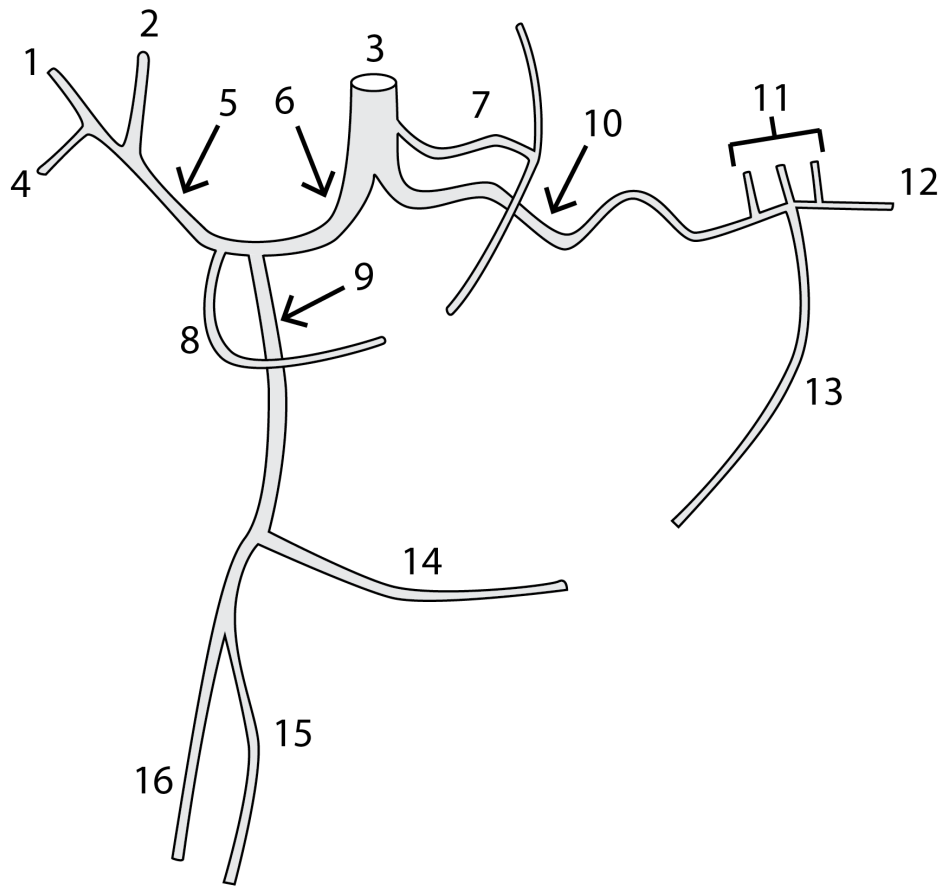


Fig. 45 Coeliac trunk

1. Right branch of hepatic artery proper
2. Left branch of hepatic artery proper
3. Coeliac trunk
4. Cystic artery
5. Hepatic artery proper
6. Common hepatic artery
7. Left gastric artery
8. Right gastric artery
9. Gastroduodenal artery
10. Splenic artery
11. Short gastric arteries
12. Splenic branches
13. Left gastro-omental artery
14. Right gastro-omental artery
15. Posterior superior pancreaticoduodenal artery
16. Anterior superior pancreaticoduodenal artery

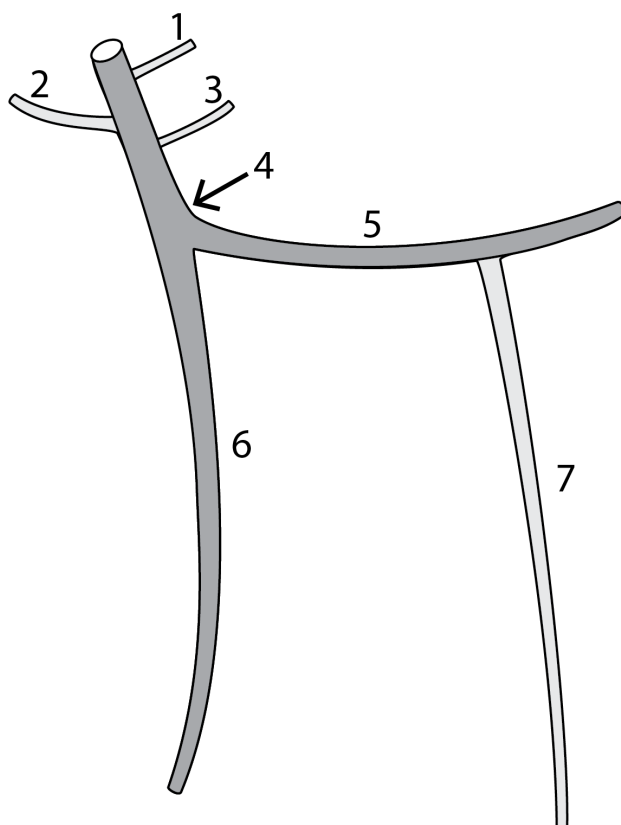


Fig. 46 Portal vein

- 1. Right gastric vein
- 2. Cystic vein
- 3. Left gastric vein
- 4. Portal vein
- 5. Splenic vein
- 6. Superior mesenteric vein
- 7. Inferior mesenteric vein

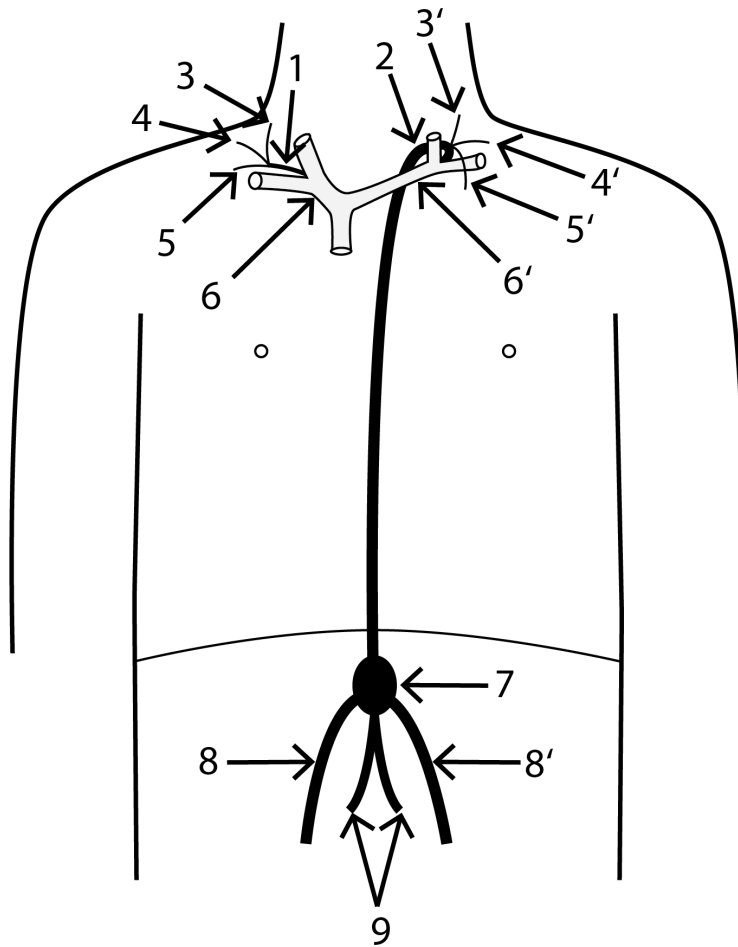


Fig. 47 Main lymphatic trunks

1. Right lymphatic trunk
2. Thoracic duct
3. Right jugular trunk
- 3'. Left jugular trunk
4. Right subclavian trunk
- 4'. Left subclavian trunk
5. Right bronchomediastinal trunk
- 5'. Left bronchomediastinal trunk
6. Right brachiocephalic vein
- 6'. Left brachiocephalic vein
7. Cisterna chyli
8. Right lumbar trunk
- 8'. Left lumbar trunk
9. Intestinal trunks

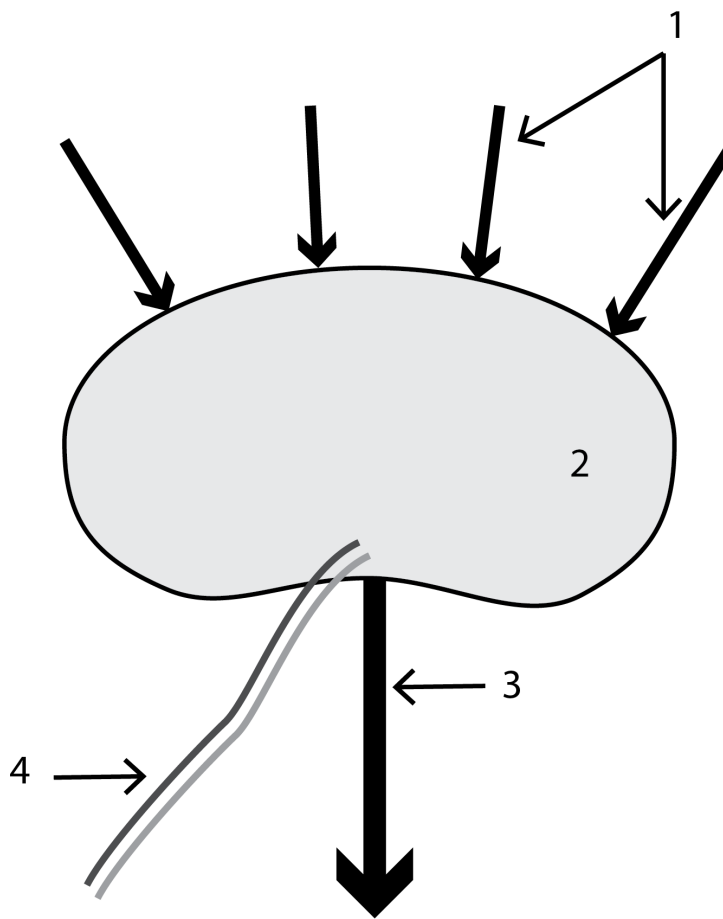


Fig. 48 Lymph node

- 1. Afferent vessels
- 2. Lymph node
- 3. Efferent vessel
- 4. Blood vessels

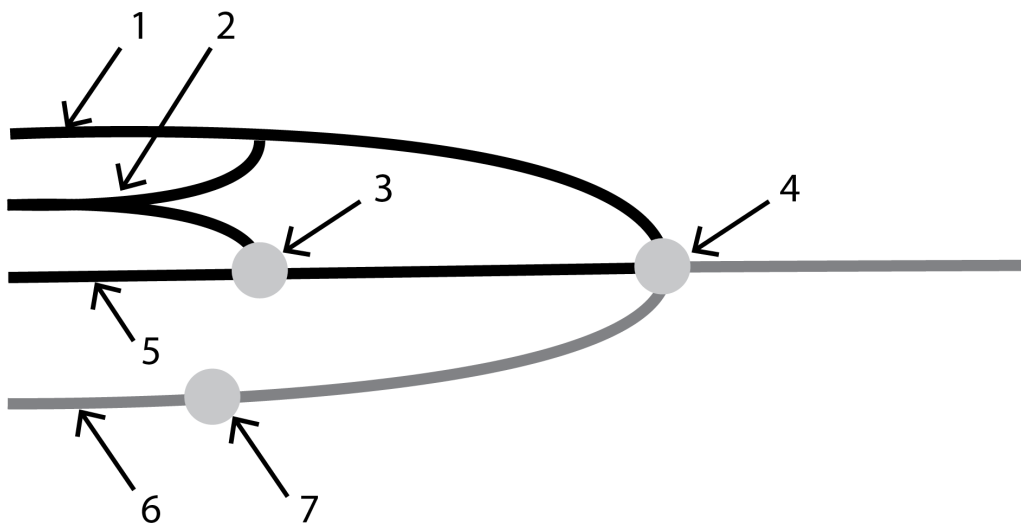


Fig. 49 Lymphatic drainage of the upper limb

1. Lateral superficial vessels
2. Anterior superficial vessels
3. Superficial cubital nodes
4. Axillary lymph nodes
5. Medial superficial vessels
6. Deep lymphatic vessels
7. Deep cubital nodes

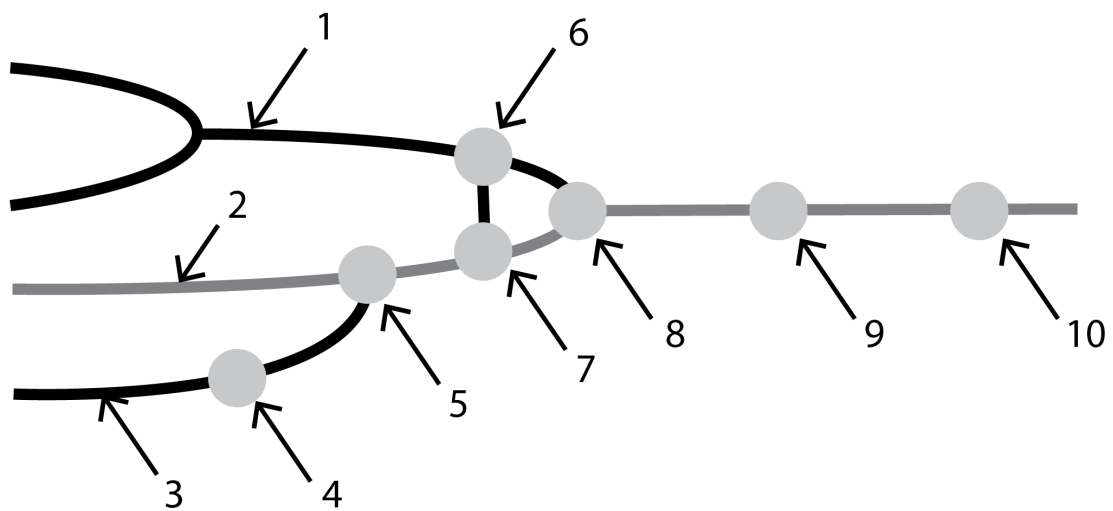


Fig. 50 Lymphatic drainage of the lower limb

1. Medial superficial vessels
2. Deep lymphatic vessels
3. Lateral superficial vessels
4. Superficial popliteal nodes
5. Deep popliteal nodes
6. Superficial inguinal nodes
7. Deep inguinal nodes
8. External iliac nodes
9. Common iliac nodes
10. Lumbar nodes

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Centrum interaktivních a multimediálních studijních opor pro inovaci výuky a efektivní učení



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ