

Memorix team	V
Foreword or Why is Memorix Anatomy revolutionary?	XII
Memorix Education System	XIII
Acknowledgements to co-workers	XIV
Editors	XVI
Illustrators	XVI
Co-authors	XVII

1 General anatomy 1

1 Definitions and history	2	8 Terms of location and direction of the human body.....	9
2 Terms and abbreviations	3	9 Parts of the human body and constitutional typology.....	10
3 Histology	4	10 Regions of the human body.....	11
4 Embryology	5	11 Eponyms.....	12
5 Anatomical changes in childhood.....	6	12 Review questions and figures.....	14
6 Anatomical changes in puberty.....	7	13 Acknowledgements and references	16
7 Planes and lines of the human body.....	8		

2 Bones 17

1 General overview.....	18	5 Bones of the upper limb – Ossa membri superioris	42
2 Skull – Cranium.....	21	5.1 Clavicle (collarbone) – Clavicula.....	42
2.1 Frontal bone – Os frontale	22	5.2 Scapula (shoulder blade) – Scapula	43
2.2 Occipital bone – Os occipitale.....	23	5.3 Humerus – Humerus	44
2.3 Sphenoidal bone (sphenoid) – Os sphenoidale	24	5.4 Ulna (elbow bone) – Ulna	45
2.4 Parietal bone – Os parietale.....	26	5.5 Radius (radial bone) – Radius	46
2.5 Temporal bone – Os temporale.....	27	5.6 Bones of the hand – Ossa manus.....	47
2.6 Ethmoidal bone (ethmoid) – Os ethmoidale	30	6 Bones of the lower limb – Ossa membri inferioris	48
2.7 Inferior nasal concha – Concha nasalis inferior	30	6.1 Pelvis – Pelvis	49
2.8 Lacrimal bone, nasal bone and vomer	31	6.1.1 Hip bone (pelvic bone) – Os coxae	50
2.9 Zygomatic bone – Os zygomaticum.....	31	6.2 Femur (thigh bone) – Femur	52
2.10 Palatine bone – Os palatinum.....	32	6.3 Patella (kneecap) – Patella	53
2.11 Maxilla – Maxilla	33	6.4 Tibia (shinbone) – Tibia.....	53
2.12 Mandible – Mandibula	34	6.5 Fibula (calf bone) – Fibula	54
2.13 Hyoid bone – Os hyoideum	35	6.6 Bones of foot – Ossa pedis.....	54
2.14 Skull of a newborn	35	7 Figures	57
2.15 Skull anthropometry	36	7.1 Cranial base.....	57
3 Vertebral column – Columna vertebralis	37	8 Tables	58
3.1 Cervical vertebrae – Vertebrae cervicales.....	38	8.1 Openings of the skull and their content.....	58
3.2 Thoracic vertebrae – Vertebrae thoracicae.....	39	8.2 Structures of the upper limb	60
3.3 Lumbar vertebrae – Vertebrae lumbales	39	8.3 Structures of the lower limb.....	62
3.4 Sacrum and coccyx – Os sacrum et os coccygis	40	9 Review questions and figures.....	64
4 Thorax – Thorax.....	41	10 Acknowledgements and references	66

3 Joints 67

1 General overview.....	68	6 Joints of the lower limb – Juncturae membri inferioris.....	82
1.1 General organisation of the synovial joint	69	6.1 Sacro-iliac joint – Articulatio sacroiliaca	82
2 Joints of the skull – Juncturae cranii.....	72	6.2 Synarthroses of the pelvic girdle – Synarthroses cinguli pelvici	82
3 Vertebral joints – Juncturae columnae vertebralis	73	6.3 Hip joint – Articulatio coxae	83
3.1 Vertebral synovial joints – Articulationes columnae vertebralis	74	6.4 Knee joint – Articulatio genus	84
4 Thoracic joints – Juncturae thoracis.....	75	6.5 Tibiofibular joint – Articulatio tibiofibularis.....	86
5 Joints of the upper limb – Juncturae membri superioris.....	76	6.6 Interosseous membrane of the leg and tibiofibular syndesmosis	86
5.1 Sternoclavicular joint – Articulatio sternoclavicularis.....	76	6.7 Joints of the foot – Articulationes pedis	86
5.2 Acromioclavicular joint – Articulatio acromioclavicularis.....	76	6.7.1 Arches of the foot	86
5.3 Shoulder (glenohumeral) joint	77	7 Tables	90
– Articulatio humeri (glenohumeralis).....	77	7.1 Movements of the head, neck	90
5.4 Elbow joint – Articulatio cubiti.....	78	and temporomandibular joint (muscles).....	90
5.5 Distal radio-ulnar joint and radio-ulnar syndesmosis	79	7.2 Movements of the limbs (degree of freedom)	91
– Articulatio radioulnaris distalis et syndesmosis radioulnaris.....	79	7.3 Movements of the upper limb (muscles)	92
5.6 Wrist joint – Articulatio radiocarpalis.....	79	7.4 Movements of the lower limb (muscles).....	93
5.7 Joints of the hand – Articulationes manus.....	80	8 Review questions and figures.....	94
		9 Acknowledgements and references	96

4

Muscles

97

1 General overview	98	8.3 Muscles of the forearm – Musculi antebrachii	136
2 Muscles of the head – Musculi cranii	102	8.3.1 Anterior group	137
2.1 Facial muscles – Musculi faciei	102	8.3.2 Lateral group	139
2.2 Masticatory muscles – Musculi masticatorii	108	8.3.3 Posterior group	140
2.3 Fasciae of the head	109	8.4 Muscles of the hand – Musculi manus	142
3 Muscles of the neck – Musculi colli	110	8.4.1 Muscles of the thenar eminence (thumb group)	143
3.1 Superficial muscle group – Musculi colli superficiales	111	8.4.2 Muscles of the hypotenar eminence (little finger group) ...	144
3.2 Suprahyoid muscles – Musculi suprahyoidei	112	8.4.3 Interossei and lumbricals	145
3.3 Infrahyoid muscles – Musculi infrahyoidei	113	8.5 Tendinous sheaths of the upper limb	
3.4 Scaleni – Musculi scaleni	114	– Vaginae tendinum membri superioris	146
3.5 Deep muscle group – Musculi colli profundi	115	8.6 Fasciae of the upper limb	147
3.6 Cervical fascia – Fascia cervicalis	115	9 Muscles of the lower limb – Musculi membri inferioris	148
4 Muscles of the back – Musculi dorsi	116	9.1 Muscles of the hip joint	148
4.1 Superficial layer (spinohumeral muscles)	117	9.1.1 Anterior group	149
4.2 2 nd layer (spinocapular muscles)	118	9.1.2 Posterior group	150
4.3 3 rd layer (spinocostal muscles)	118	9.2 Muscles of the thigh – Musculi femoris	152
4.4 Muscles of the back proper – Musculi dorsi proprii	119	9.2.1 Anterior group	153
4.5 Fasciae of the back	123	9.2.2 Medial group	154
5 Muscles of the thorax – Musculi thoracis	124	9.2.3 Posterior group	155
5.1 Muscles of the thorax – thoracohumeral muscles	125	9.3 Muscles of the leg – Musculi cruris	156
5.2 Muscles of the thorax proper	126	9.3.1 Anterior group	157
5.3 Diaphragm – Diaphragma	127	9.3.2 Lateral group	157
5.4 Fasciae of the thorax	127	9.3.3 Posterior group	158
6 Muscles of the abdomen – Musculi abdominis	128	9.4 Muscles of the foot – Musculi pedis	160
6.1 Anterior group	128	9.4.1 Dorsal group	161
6.2 Lateral group	129	9.4.2 Medial group (group of the great toe)	161
6.3 Posterior group	130	9.4.3 Lateral group (group of the little toe)	162
6.4 Fasciae of the abdomen	130	9.4.4 Middle group	162
7 Pelvic diaphragm / pelvic floor – Diaphragma pelvis	131	9.4.5 Interossei and lumbricals	163
7.1 Fasciae of the pelvis	132	9.5 Tendinous sheaths of the lower limb	
8 Muscles of the upper limb – Musculi membri superioris	133	– Vaginae tendinum membri inferioris	164
8.1 Muscles of the shoulder joint	133	9.6 Fasciae of the lower limb	165
8.2 Muscles of the arm – Musculi brachii	134	10 Review questions and figures	166
		11 Acknowledgements and references	168

5

Digestive system

169

1 General overview	170	6.1 Duodenum – Duodenum	188
2 Oral cavity – Cavitas oris	172	6.2 Jejunum and ileum – Jejunum et ileum	190
2.1 Cheek – Bucca	172	7 Large intestine – Intestinum crassum	191
2.2 Lips – Labia oris	173	7.1 Caecum – Caecum	192
2.3 Gum – Gingiva	173	7.1.1 Vermiform appendix – Appendix vermiformis	193
2.4 Teeth – Dentes	174	7.2 Colon – Colon	193
2.5 Tongue – Lingua	176	7.2.1 Ascending colon – Colon ascendens	193
2.6 Palate – Palatum	178	7.2.2 Transverse colon – Colon transversum	194
2.6.1 Hard palate – Palatum durum	178	7.2.3 Descending and sigmoid colon	
2.6.2 Soft palate – Palatum molle	179	– Colon descendens et sigmoideum	194
2.7 Palatine tonsil – Tonsilla palatina	178	7.3 Rectum – Rectum	195
2.8 Salivary glands – Glandulae salivariae	180	8 Liver – Hepar	196
3 Pharynx – Pharynx	182	9 Gallbladder – Vesica biliaris/fellea	199
4 Oesophagus – Oesophagus	185	10 Pancreas – Pancreas	200
5 Stomach – Gaster	186	11 Peritoneum – Peritoneum	201
6 Small intestine – Intestinum tenue	188	12 Review questions and figures	202
		13 Acknowledgements and references	204

6

Respiratory system

205

1 General overview	206	8 Bronchi – Bronchi	215
2 Nose – Nasus	206	9 Lungs – Pulmones	216
3 Nasal cavity – Cavitas nasi	207	10 Pleura – Pleura	220
4 Paranasal sinuses – Sinus paranasales	208	11 Mechanics of breathing movements	221
5 Pharynx – Pharynx	209	12 Tables – Laryngeal muscles by function	222
6 Larynx – Larynx	210	13 Review questions and figures	222
7 Trachea – Trachea	214	14 Acknowledgements and references	224

7	Urinary system	225
1 General overview	226	
2 Kidneys – Renes	227	
3 Renal pelvis and renal calices – Pelvis renalis et calices renales	230	
4 Ureter – Ureter	230	
5 Urinary bladder – Vesica urinaria	231	
6 Female urethra – Urethra feminina	233	
7 Dynamics of micturition	233	
8 Review questions and figures	234	
9 Acknowledgements and references	236	
8	Genital system	237
1 Development of the genital system	238	
2 Male genital system – Organa genitalia masculina	239	
2.1 Testis – Testis	240	
2.2 Epididymis – Epididymis	242	
2.3 Ductus deferens – Ductus deferens	243	
2.4 Spermatic cord – Funiculus spermaticus	243	
2.5 Seminal glands – Glandulae vesiculosae	244	
2.6 Bulbo-urethral glands – Glandulae bulbourethrales	244	
2.7 Prostate – Prostate	245	
2.8 Scrotum – Scrotum	246	
2.9 Penis – Penis	247	
2.10 Male urethra – Urethra masculina	248	
3 Female genital system – Organa genitalia feminina	249	
3.1 Ovary – Ovarium	250	
3.2 Uterine/Fallopian tube – Tuba uterina Fallopii	251	
3.3 Uterus – Uterus	252	
3.4 Vagina – Vagina	254	
3.5 Female external genitalia (vulva) – Organa genitalia feminina externa (vulva)	255	
4 Perineum and its muscles – Perineum et muscoli perinei	256	
5 Anatomy in pregnancy	257	
6 Fetal membranes, placenta and umbilical cord	258	
7 Fetal anatomy and anatomy of labour	259	
8 Review questions and figures	260	
9 Acknowledgements and references	262	
9	Heart and blood vessels	263
1 General overview of the blood vessels	264	
2 General overview of the heart	265	
3 Heart – Cor	266	
3.1 Right atrium – Atrium dextrum	268	
3.2 Right ventricle – Ventriculus dexter	269	
3.3 Left atrium – Atrium sinistrum	270	
3.4 Left ventricle – Ventriculus sinister	271	
3.5 Valves – Valvae	272	
3.6 Cardiac skeleton – Skeleton cordis	273	
3.7 Conducting system of the heart – Complexus stimulans cordis	273	
3.8 Fetal circulation	274	
3.9 Coronary arteries – Arteriae coronariae	275	
3.10 Veins of the heart – Venae cordis	275	
3.11 Clinical anatomy of the heart	276	
4 Arteries – Arteriae	277	
4.1 Aorta – Aorta	277	
4.2 Ascending aorta and aortic arch – Aorta ascendens et arcus aortae	277	
4.3 Common carotid artery – Arteria carotis communis	278	
4.4 External carotid artery – Arteria carotis externa	278	
4.4.1 External carotid artery – ventral and medial branches	279	
4.4.2 External carotid artery – dorsal branches	280	
4.4.3 Superficial temporal artery – Arteria temporalis superficialis	280	
4.4.4 Maxillary artery – Arteria maxillaris	281	
4.5 Subclavian artery – Arteria subclavia	282	
4.5.1 Vertebral artery – Arteria vertebralis	282	
4.5.2 Subclavian artery – other branches	283	
4.6 Axillary artery – Arteria axillaris	284	
4.7 Brachial artery – Arteria brachialis	284	
4.8 Radial and ulnar arteries and superficial and deep palmar arches – Arteria radialis et ulnaris, arcus palmaris superficialis et profundus	285	
4.9 Thoracic aorta – Aorta thoracica	286	
4.10 Abdominal aorta – Aorta abdominalis	287	
4.10.1 Coeliac trunk – Truncus coeliacus	288	
4.10.2 Inferior and superior mesenteric artery – Arteria mesenterica superior et inferior	289	
4.11 Common iliac artery – Arteria iliaca communis	290	
4.11.1 Internal iliac artery (parietal branches) – Arteria iliaca interna	290	
4.11.2 Internal iliac artery (visceral branches) – Arteria iliaca interna	291	
4.11.3 External iliac artery – Arteria iliaca externa	291	
4.12 Femoral and popliteal artery – Arteria femoralis et arteria poplitea	292	
4.13 Anterior and posterior tibial arteries – Arteria tibialis anterior et posterior	293	
5 Veins – Venae	294	
5.1 Superior vena cava – Vena cava superior	294	
5.2 Internal jugular vein – Vena jugularis interna	295	
5.3 External jugular vein – Vena jugularis externa	296	
5.4 Subclavian and axillary veins – Vena subclavia et vena axillaris	296	
5.5 Veins of the upper limb – Venae membri superioris	297	
5.6 Inferior vena cava – Vena cava inferior	297	
5.7 Portal vein – Vena portae	298	
5.8 Porto-caval anastomoses	299	
5.9 Cavo-caval anastomoses	299	
5.10 Common iliac vein – Vena iliaca communis	300	
5.10.1 Internal iliac vein – Vena iliaca interna	300	
5.10.2 External iliac vein – Vena iliaca externa	301	
5.11 Veins of the lower limb – Venae membri inferioris	301	
6 Schemes	302	
6.1 Schemes of the heart	302	
6.2 Schemes of arteries	304	
6.3 Schemes of veins	310	
7 Tables		
7.1 Tables of perforators – Venae perforantes	311	
8 Review questions and figures	314	
9 Acknowledgements and references	316	

10

Lymphatic and immune systems

317

1 General overview	318	8.5 Abdominal lymph nodes – Nodi lymphoidei abdominis.....	327
2 Lymphatic vessels – Vasa lymphoidea.....	319	8.6 Pelvic lymph nodes – Nodi lymphoidei pelvis.....	328
3 Thymus – Thymus.....	320	8.7 Lymph nodes of the lower limb	
4 Bone marrow – Medulla ossium	320	– Nodi lymphoidei membri inferioris.....	328
5 Spleen – Splen (lien).....	321	8.8 Sentinel lymph nodes of the respiratory and digestive system.....	329
6 Tonsils – Tonsillae.....	322	8.9 Sentinel lymph nodes of the urinary and genital system	330
7 Non-encapsulated lymphoid tissue	323	9 Schemes	331
8 Lymph nodes – Nodi lymphoidei (nodi lymphatici, lymphonodi).....	323	9.1 Lymphatic drainage of the abdomen and pelvis (lymph nodes)	331
8.1 Lymph nodes of the head – Nodi lymphoidei capitis.....	324	9.2 Lymphatic drainage of the abdomen	
8.2 Lymph nodes of the neck – Nodi lymphoidei colli	324	and pelvis (lymphatic trunks)	331
8.3 Lymph nodes of the upper limb		10 Review questions and figures	332
– Nodi lymphoidei membri superioris	325	11 Acknowledgements and references	334
8.4 Thoracic lymph nodes – Nodi lymphoidei thoracis.....	326		

11

Peripheral nervous system

335

1 General overview	336	3.10 N. X Vagus nerve – Nervus vagus	364
1.1 General structure of the spinal nerve	337	3.11 N. XI Accessory nerve – Nervus accessorius	366
1.2 Reflex arch	338	3.12 N. XII Hypoglossal nerve – Nervus hypoglossus.....	366
2 Spinal nerves – Nervi spinales.....	339	4 Autonomic nervous system (ANS).....	367
2.1 Cervical plexus – Plexus cervicalis (C1–C4)	340	4.1 Sympathetic part – Pars sympathica	368
2.2 Brachial plexus – Plexus brachialis (C4–T1).....	342	4.2 Parasympathetic part – Pars parasympathica.....	371
2.2.1 Supraclavicular part of the brachial plexus	342	4.3 Mixed autonomic plexuses	372
2.2.2 Infraclavicular part of the brachial plexus.....	343	4.4 Enteric nervous system.....	374
2.3 Thoracic nerves – Nervi thoracici (T1–T12).....	346	5 Schemes	375
2.4 Lumbar plexus – Plexus lumbalis (T12–L4).....	346	5.1 Scheme of the peripheral nervous system	375
2.5 Sacral plexus – Plexus sacralis (L4–S4)	348	5.2 Cervical plexus	375
2.6 Dermatomes and myotomes	350	5.3 Brachial plexus	376
2.7 Peripheral nerve fields – Areae nervinae.....	351	5.4 Brachial plexus – final branches	376
3 Cranial nerves – Nervi craniales	352	5.5 Lumbar and sacral plexus	378
3.1 N. I Olfactory nerve – Nervus olfactorius	354	5.6 Sacral plexus – branches	379
3.2 N. II Optic nerve – Nervus opticus.....	354	5.7 N. I, II, III, IV, VI.....	380
3.3 N. III Oculomotor nerve – Nervus oculomotorius.....	355	5.8 N. V.....	381
3.4 N. IV Trochlear nerve – Nervus trochlearis	355	5.9 N. VII, VIII, IX	382
3.5 N. V Trigeminal nerve – Nervus trigeminus	356	5.10 N. X, XI, XII.....	383
3.6 N. VI Abducent / Abducens nerve – Nervus abducens.....	360	5.11 Parasympathetic and sympathetic innervation of the head.....	384
3.7 N. VII Facial nerve – Nervus facialis.....	360	6 Figures and review questions.....	385
3.8 N. VIII Vestibulocochlear nerve – Nervus vestibulocochlearis.....	362	7 Acknowledgements and references	388
3.9 N. IX Glossopharyngeal nerve – Nervus glossopharyngeus.....	363		

12

Central nervous system

389

1 General overview	390	10 Motor control.....	456
1.1 Microscopic structure – neurons.....	390	10.1 Descending (motor) tracts	458
1.2 Microscopic structure – neuroglia.....	391	11 Special sensory tracts	
1.3 Distribution of white and grey matter	391	11.1 Visual pathway.....	462
1.4 Nervous system development.....	392	11.2 Vestibular pathway	464
1.5 Brain development.....	393	11.3 Auditory pathway	465
1.6 Nervous tracts – Tractus nervosi.....	394	11.4 Olfactory pathway	466
1.7 Directions, planes and special terms in the CNS	395	11.5 Gustatory pathway	467
1.8 CNS function	396	12 Ventricular system of the brain	468
2 Spinal cord – Medulla spinalis.....	398	12.1 Cerebrospinal fluid – Liquor cerebrospinalis	470
2.1 Spinal cord – white and grey substances.....	400	13 Meninges – Meninges	471
3 Brainstem – Truncus encephali	402	14 Arteries of the brain – Arteriae cerebri.....	472
3.1 Medulla oblongata – Medulla oblongata	404	15 Veins of the brain – Venae cerebri	474
3.2 Pons – Pons	406	15.1 Dural venous sinuses – Sinus durae matris.....	475
3.3 Midbrain – Mesencephalon.....	408	16 Blood supply of the spinal cord	476
3.4 Cranial nerves nuclei	410	17 Chemical system of the brain	477
3.5 Tracts of the cranial nerves	411	18 Psychomotor development	478
3.6 Specific nuclei of the brainstem.....	412	19 Sections	
3.7 Specific tracts of the brainstem.....	413	19.1 Cross-sections of the spinal cord	482
4 Reticular formation – Formatio reticularis.....	414	19.2 Cross-sections of the medulla oblongata	483
5 Cerebellum – Cerebellum.....	418	19.3 Cross-sections of the pons.....	484
6 Diencephalon – Diencephalon	424	19.4 Cross-sections of the midbrain	485
6.1 Epithalamus – Epithalamus	425	19.5 Sagittal and transverse section of the brain.....	486
6.2 Subthalamus – Subthalamus	425	19.6 Frontal sections of the brain.....	487
6.3 Thalamus – Thalamus	426	20 Table – Cerebral sulci	488
6.4 Hypothalamus – Hypothalamus	430	21 Schemes	
7 Telencephalon – Telencephalon	432	21.1 Scheme of cranial nerves nuclei.....	488
7.1 Cerebral cortex – Cortex cerebri (pallium).....	434	21.2 Scheme of the ventricular system, arteries of the brain and venous sinuses	489
7.2 Functional cortical areas	435	21.3 Schemes of somatosensory tracts.....	490
7.3 Basal nuclei – Nuclei basales	439	21.4 Schemes of special sensory tracts	491
7.4 White substance – Corpus medullare.....	442	21.5 Schemes of motor tracts.....	492
8 Limbic system.....	444	21.6 Scheme of afferentation and efferentation of the cerebellum.....	493
8.1 Limbic system development.....	448	22 Review questions and figures.....	494
9 Sensory	450	23 Acknowledgements and references	500
9.1 Ascending tracts	452		

13

Senses and skin

501

1 Senses.....	502	1.5.1 Accessory visual structures – Structurae accessoriae oculi.....	512
1.1 Internal environment – Interoceptors	502	1.6 Touch, pain, proprioception – Tactus, nociceptio, proprioceptio.....	514
1.2 Olfactory organ – Organum olfactorium.....	503	2 Skin / Integument – Integumentum commune	515
1.3 Gustatory organ – Organum gustatorium.....	503	2.1 Breast and mammary gland – Mamma et glandula mammaria	517
1.4 Organ of hearing and balance – Organum vestibulocochleare	504	3 Review questions and figures.....	518
1.5 Visual organ – Organum visus.....	508	4 Acknowledgements and references	520

14

Endocrine system

521

1 General overview	522	6 Thyroid and parathyroid gland	
2 Diffuse neuroendocrine system (DNES) and paraganglia	522	– Glandula thyroidea et glandulae parathyroideae	525
3 Hypophysis / pituitary gland – Hypophysis / glandula pituitaria.....	523	7 Suprarenal/adrenal glands – Glandula suprarenalis.....	526
4 Pineal gland – Glandula pinealis / corpus pineale	524	8 Summary of the endocrine glands and their hormones.....	527
5 Endocrine component of the pancreas – pancreatic islets.....	524	9 Review questions and figures.....	527
		10 Acknowledgements and references	528

1 Topography of the head	530	6 Topography of the back	568
1.1 Skullcap layers	531	6.1 Vertebral canal – Canalis vertebralis.....	568
1.2 Cheek layers	531	6.2 Suboccipital triangle – Trigonum suboccipitale.....	569
1.3 Orbit – Orbita.....	532	6.3 Superior and inferior lumbar triangles – Trigonum lumbale superius et inferius.....	569
1.4 Common tendinous ring – Anulus tendineus communis.....	534	7 Topography of the upper limb	570
1.5 Cavernous sinus – Sinus cavernosus.....	534	7.1 Topography of the shoulder – Regio deltoidea.....	570
1.6 Internal acoustic meatus – Meatus acusticus internus.....	534	7.1.1 Suprascapular and spinoglenoid notch – Incisura scapulae et spinoglenoidalis.....	570
1.7 Tympanic cavity – Cavitas tympani.....	535	7.1.2 Axilla – Fossa axillaris.....	571
1.8 Nasal cavity – Cavitas nasi.....	536	7.1.3 Triangular and quadrangular space – Foramen omotricipitale et humerotricipitale.....	572
1.9 Internal surface of the cranial base – Basis cranii interna.....	537	7.1.4 Clavipectoral triangle – Trigonum clavipectorale/deltopectorale.....	572
1.10 Temporal fossa – Fossa temporalis.....	537	7.2 Topography of the arm – Regio brachialis.....	573
1.11 Infratemporal fossa – Fossa infratemporalis.....	538	7.2.1 Radial canal – Canalis nervi radialis.....	573
1.12 Pterygopalatine fossa – Fossa pterygopalatina.....	539	7.3 Topography of the elbow – Regio cubitalis.....	574
1.13 Subdivisions of the infratemporal fossa	540	7.3.1 Cubital fossa – Fossa cubitalis.....	574
1.13.1 Pterygomandibular space – Spatium pterygomandibulare.....	540	7.3.2 Pronator, cubital and supinator canals – Canalis pronatorius, cubitalis et supinatorius.....	575
1.13.2 Parapharyngeal space – Spatium parapharyngeum.....	540	7.4 Topography of the forearm – Regio antebrachialis.....	575
1.13.3 Prestyloid space – Spatium prestyloideum.....	541	7.5 Topography of the wrist – Regio carpalis.....	576
1.13.4 Retrostyloid space – Spatium retrostyloideum.....	541	7.5.1 Anatomical snuff box – Foveola radialis.....	576
1.13.5 Retropharyngeal space – Spatium retropharyngeum.....	541	7.5.2 Ulnar canal – Canalis ulnaris.....	576
2 Topography of the neck	542	7.5.3 Carpal tunnel – Canalis carpi.....	577
2.1 Regions of the neck – Regiones cervicales.....	542	7.6 Topography of the hand – Regio manus.....	577
2.1.1 Submandibular triangle – Trigonum submandibulare.....	543	8 Topography of the lower limb	578
2.1.2 Carotid triangle – Trigonum caroticum.....	543	8.1 Topography of the hip – Regio coxae.....	578
2.1.3 Submental triangle – Trigonum submentale.....	544	8.1.1 Greater and lesser sciatic foramen – Foramen ischiadicum majus et minus.....	578
2.1.4 Muscular/omotracheal triangle – Trigonum musculare/omotracheale.....	544	8.1.2 Suprapiriform and infrapiriform foramen, lesser sciatic foramen – Foramen suprapiriforme et infrapiriforme, foramen ischiadicum minus.....	579
2.1.5 Lesser supraclavicular fossa – Fossa supraclavicularis minor.....	544	8.1.3 Vascular and muscular space – Lacuna vasorum et musculorum.....	579
2.1.6 Omoclavicular triangle – Trigonum omoclaviculare.....	545	8.1.4 Obturator canal – Canalis obturatorius.....	580
2.1.7 Omotrapezoid triangle – Trigonum omotrapezium.....	545	8.2 Topography of the thigh – Regio femoris.....	580
2.1.8 Scalene fissure – Fissura scalenorum.....	545	8.2.1 Femoral triangle and iliopectineal fossa – Trigonum femorale et fossa iliopectinea.....	581
2.1.9 Scalenovertbral triangle – Trigonum scalenovertbrale.....	546	8.2.2 Adductor canal – Canalis adductorius.....	581
2.2 Spaces of the neck	546	8.2.3 Popliteal fossa – Fossa poplitea.....	582
2.3 Layers of the neck, cervical fascia – Fascia cervicalis.....	547	8.3 Topography of the leg – Regio cruris.....	582
3 Topography of the thorax	548	8.3.1 Fibular canal, tendinous arch of the soleus and musculofibular canal – Canalis fibularis, arcus tendineus musculi solei, canalis musculofibularis.....	583
3.1 Layers of the thoracic wall	548	8.4 Topography of the ankle – Regio tarsalis.....	583
3.2 Intercostal space – Spatium intercostale.....	549	8.4.1 Structures behind the lateral ankle	583
3.3 Organ projections on the thoracic wall	549	8.4.2 Tarsal canal – Canalis malleolaris.....	584
3.4 Mediastinum – Mediastinum.....	550	8.4.3 Structures in front of the medial ankle	584
3.5 Relationship between the oesophagus, trachea and aorta	552	8.5 Topography of the foot – Regio pedis.....	585
3.6 Openings of the diaphragm	553	8.5.1 Dorsum of the foot – Dorsum pedis.....	585
4 Topography of the abdomen	554	8.5.2 Sole – Planta.....	585
4.1 Structure of the anterior and lateral abdominal wall	555	9 Sections	586
4.1.1 Rectus sheath – Vagina musculi recti abdominis.....	555	9.1 Sections of the head	586
4.2 Inguinal canal – Canalis inguinalis.....	556	9.2 Sections of the neck	587
4.3 Inguinal region – Regio inguinalis.....	558	9.3 Sections of the thorax	588
4.3.1 Predilectional locations of herniae	558	9.4 Sections of the abdomen	589
4.4 Abdominal cavity – Cavitas abdominis.....	559	9.5 Sections of the pelvis	590
4.5 Retroperitoneal space – Retroperitoneum.....	559	9.6 Sections of the arm and forearm	592
4.6 Peritoneal cavity – Cavitas peritonealis.....	560	9.7 Sections of the wrist and hand	593
4.6.1 Root of the transverse mesocolon – Radix mesocoli transversi.....	560	9.8 Sections of the thigh and leg	594
4.6.2 Bursa omentalis	561	9.9 Section of the foot	595
4.6.3 Hepatoduodenal ligament and cystohepatic triangle	562	10 Review questions and figures	595
4.6.4 Paracolic spaces	562	11 Acknowledgements and references	600
4.6.5 Mesenteries, omenta, peritoneal ligaments and recesses of the peritoneal cavity	563		
5 Topography of the lesser pelvis – Pelvis minor.....	564		
5.1 Peritoneal cavity of the pelvis – Cavitas peritonealis pelvis.....	564		
5.2 Subperitoneal space – Subperitoneum.....	565		
5.3 Perineal region – Regio perinealis.....	566		
5.4 Urogenital triangle – Trigonum urogenitale.....	566		
5.5 Ischioanal fossa – Fossa ischioanalisis.....	567		
5.6 Pudendal canal – Canalis pudendalis.....	567		
5.7 Scrotum	567		