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Table of Contents

Cover image
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Dedication

ACKNOWLEDGMENTS

FOREWORD
FOREWORD

PREFACE

Chapter 1: THE BODY

Anatomical position, terms, and planes
Anatomical planes and imaging
Surface anatomy: anterior view
Surface anatomy: posterior view
Skeleton: anterior
Skeleton: posterior
Muscles: anterior
Muscles: posterior
Vascular system: arteries
Vascular system: veins
Lymphatic system
Nervous system
Sympathetics
Parasympathetics
Dermatomes
Cutaneous nerves

Chapter 2: BACK
Surface anatomy
Vertebral column
Regional vertebrae
Cervical vertebrae
Thoracic vertebrae
Lumbar vertebrae
Sacrum
Intervertebral foramina and discs
Intervertebral disc problems
Joints and ligaments
Back musculature: surface anatomy

Superficial musculature

Intermediate musculature

Deep musculature

Back musculature: transverse section

Suboccipital region

Spinal nerves

Spinal cord

Spinal cord vasculature

Venous drainage of spinal cord

Meninges

Spinal cord: imaging

Transverse section: thoracic region

Dermatomes and cutaneous nerves

Tables

Chapter 3: THORAX

Surface anatomy with bones

Bony framework

Ribs

Articulations

Breast
Pectoral region
Thoracic wall muscles
Diaphragm
Arteries of the thoracic wall
Veins of the thoracic wall
Nerves of the thoracic wall
Lymphatics of the thoracic wall
Intercostal nerves and arteries
Pleural cavities and mediastinum
Parietal pleura
Surface projections of pleural recesses
Right lung
Left lung
Lung lobes: surface relationship
Lung lobes: imaging
Bronchial tree
Bronchopulmonary segments
Pulmonary vessels and plexus
Pulmonary vessels: imaging
Mediastinum
Pericardium
Pericardial layers

Anterior surface of heart

Base and diaphragmatic surface of heart

Right atrium

Right ventricle

Left atrium

Left ventricle

Aortic valve and cardiac skeleton

Cardiac chambers and heart valves

Coronary vessels

Coronary arteries and variations

Cardiac conduction system

Auscultation points and heart sounds

Cardiac innervation

Superior mediastinum: thymus

Superior mediastinum: veins and arteries

Superior mediastinum: arteries and nerves

Superior mediastinum: imaging

Superior mediastinum: veins and trachea

Mediastinum: imaging

Mediastinum: view from right
Chapter 4: ABDOMEN

Surface anatomy

Quadrants and regions

Abdominal wall

Muscles

Muscles: rectus sheath

Vessels of the abdominal wall

Arteries and lymphatics of the abdominal wall

Nerves of the abdominal wall

Dermatomes and cutaneous nerves

Inguinal region
Inguinal canal in men
Inguinal canal in women
Inguinal hernias
Anterior abdominal wall
Greater omentum
Abdominal viscera
Peritoneal cavity
Abdominal sagittal section
Abdominal coronal section
Arterial supply of viscera
Stomach
Spleen
Arteries of stomach and spleen
Duodenum
Small intestine
Large intestine
Ileocecal junction
Gastrointestinal tract: imaging
Mesenteric arteries
Liver
Vessels of the liver
Segments of the liver
Pancreas and gallbladder
Vasculature of pancreas and duodenum
Venous drainage of viscera
Portosystemic anastomoses
Posterior wall
Vessels of the posterior wall
Diaphragm
Kidneys
Gross structure of kidneys
Kidneys: imaging
Renal vasculature
Branches of the abdominal aorta
Inferior vena cava
Abdominal aorta and inferior vena cava: imaging
Lumbar plexus
Lumbar plexus: cutaneous distribution
Lymphatics
Abdominal innervation
Splanchnic nerves
Visceral efferent (motor) innervation diagram
Chapter 5: PELVIS AND PERINEUM

Surface anatomy and articulated pelvis in men
Surface anatomy and articulated pelvis in women
Pelvic girdle
Pelvic girdle: imaging
Lumbosacral joint
Sacro-iliac joint
Pelvic inlet and outlet
Orientation of pelvic girdle and pelvic brim
Pelvic viscera and perineum in men
Pelvic viscera and perineum in men: imaging
Pelvic viscera and perineum in women
Pelvic viscera and perineum in women: imaging
Lateral wall of pelvic cavity
Floor of pelvic cavity: pelvic diaphragm
Rectum and bladder in situ
Rectum
Bladder in men
Bladder in women

Reproductive system in men

Prostate

Prostate and seminal vesicles

Scrotum

Testes

Penis

Reproductive system in women

Uterus and ovaries

Uterus

Uterus: imaging

Pelvic fascia

Arterial supply of pelvis

Venous drainage of pelvis

Vasculature of the pelvic viscera

Vasculature of uterus

Venous drainage of prostate and penis

Venous drainage of rectum

Sacral and coccygeal nerve plexuses

Pelvic nerve plexus

Hypogastric plexus
Surface anatomy of the perineum
Borders and ceiling of the perineum
Deep pouch and perineal membrane
Muscles and erectile tissues in men
Erectile tissue in men: imaging
Muscles and erectile tissues in women
Erectile tissue in women: imaging
Internal pudendal artery and vein
Pudendal nerve
Vasculature of perineum
Nerves of perineum
Lymphatics of pelvis and perineum in men
Lymphatics of pelvis and perineum in women
Lymphatics
Dermatomes
Innervation of reproductive system in men
Innervation of reproductive system in women
Innervation of bladder
Pelvic cavity imaging in men
Pelvic cavity imaging in women
Tables
Chapter 6: LOWER LIMB

Surface anatomy

Bones of the lower limb

Pelvic bones and sacrum

Articulated pelvis

Proximal femur

Hip joint

Hip joint: structure and arterial supply

Gluteal region: attachments and superficial musculature

Gluteal region: superficial and deep muscles

Gluteal region: arteries and nerves

Distal femur and proximal tibia and fibula

Thigh: muscle attachments

Thigh: anterior superficial musculature

Thigh: posterior superficial musculature

Thigh: anterior compartment muscles

Thigh: medial compartment muscles

Femoral triangle

Anterior thigh: arteries and nerves

Anterior thigh: arteries

Thigh: posterior compartment muscles
Posterior thigh: arteries and nerves
Transverse sections: thigh
Knee joint
Ligaments of the knee
Menisci and cruciate ligaments
Knee: bursa and capsule
Knee surface: muscles, capsule, and arteries
Popliteal fossa
Tibia and fibula
Bones of the foot
Bones and joints of the foot
Talus and calcaneus
Ankle joint
Ligaments of the ankle joint
Leg: muscle attachments
Posterior leg: superficial muscles
Posterior compartment: deep muscles
Posterior leg: arteries and nerves
Lateral compartment: muscles
Anterior leg: superficial muscles
Anterior compartment: muscles
Anterior leg: arteries and nerves

Leg: cutaneous nerves

Transverse sections: leg

Foot: muscle attachments

Foot: ligaments

Dorsum of foot

Dorsum of foot: arteries and nerves

Plantar aponeurosis

Plantar region (sole) musculature: first layer

Plantar region (sole) musculature: second layer

Plantar region (sole) musculature: third layer

Plantar region (sole) musculature: fourth layer

Plantar region (sole): arteries and nerves

Dorsal hood and tarsal tunnel

Superficial veins of the lower limb

Lymphatics of the lower limb

Anterior cutaneous nerves and dermatomes of the lower limb

Posterior cutaneous nerves and dermatomes of the lower limb

Tables

Chapter 7: UPPER LIMB

Surface anatomy
Bones of the upper limb

Bony framework of shoulder

Scapula

Clavicle: joints and ligaments

Proximal humerus

Glenohumeral joint

Muscle attachments

Pectoral region

Deep pectoral region

Walls of the axilla

The four rotator cuff muscles

Deep vessels and nerves of the shoulder

Axillary artery

Brachial artery

Brachial plexus

Medial and lateral cords

Posterior cord

Distal end of humerus and proximal end of radius and ulna

Muscle attachments

Anterior compartment: muscles

Anterior compartment: arteries and nerves
Veins of the arm

Posterior compartment: muscles

Posterior compartment: arteries and nerves

Lymphatics of the arm

Transverse sections: arm

Anterior cutaneous nerves of the arm

Posterior cutaneous nerves of the arm

Elbow joint

Elbow joint: capsule and ligaments

Cubital fossa

Radius and ulna

Bones of the hand and wrist joint

Imaging of the hand and wrist joint

Bones of the hand

Joints and ligaments of the hand

Muscle attachments of forearm

Anterior compartment of forearm: muscles

Anterior compartment of forearm: arteries and nerves

Posterior compartment of forearm: muscles

Posterior compartment of forearm: arteries and nerves

Transverse sections: forearm
Chapter 8: HEAD AND NECK

Surface anatomy with bones

Bones of the skull
Skull: anterior view
Skull: lateral view
Skull: posterior view
Skull: superior view and roof
Skull: inferior view
Skull: cranial cavity
Ethmoid, lacrimal bone, inferior concha, and vomer
Maxilla and palatine bone
Skull: muscle attachments
Scalp and meninges
Dural partitions
Dural arteries and nerves
Dural venous sinuses
Brain
Brain: imaging
Cranial nerves
Arterial supply to brain
Cutaneous distribution of trigeminal nerve [V]
Facial muscles
Vasculature, facial nerve [VII] and lymphatics
Deep arteries and veins of parotid region
Bony orbit

Section through orbit and structures of eyelid

Eyelids and lacrimal apparatus

Innervation of the lacrimal gland

Muscles of the eyeball

Innervation of the orbit and eyeball

Eye movements

Vasculature of orbit

Eyeball

Eye imaging

Ear surface and sensory innervation

Ear

Middle ear

Internal ear

Ear imaging

Temporal and infratemporal fossae

Bones of the temporal and infratemporal fossae

Temporal and infratemporal fossae

Temporomandibular joint

Mandibular division of the trigeminal nerve [V]

Parasympathetic innervation
Arteries and veins of temporal and infratemporal fossae
Pterygopalatine fossa
Neck surface anatomy
Bones of the neck
Compartments and fascia of the neck
Superficial veins of the neck
Muscles of the neck
Nerves in the neck
Cranial nerves in the neck
Cervical plexus and sympathetic trunk
Arteries of the neck
Root of the neck: arteries
Lymphatics of the neck
Pharynx
Muscles of the pharynx
Innervation of the pharynx
Vasculature of the pharynx
Larynx
Laryngeal cavity
Muscles of the larynx
Innervation of the larynx
Thyroid gland
Vasculature of the thyroid gland
Nose and paranasal sinuses
Nasal cavity: bones
Nasal cavity: mucosal linings
Vasculature and innervation of the nasal cavity
Sinus imaging
Oral cavity: bones
Teeth
Teeth: imaging
Anatomy of teeth
Vessels and nerves supplying teeth
Innervation of teeth and gums
Muscles and salivary glands of the oral cavity
Vessels and nerves of the tongue
Tongue
Hard and soft palate
Palate
Innervation of oral cavity
Cranial nerves
Visceral motor pathways in the head
Tables

INDEX
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Dedication

To my wife who supports me and to my parents who are always with me.

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To my family, to my professional colleagues and role models, and to my students.

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A working knowledge of anatomy is not an “optional extra” for health care professionals – it is fundamental. Acquiring that knowledge has always challenged even the most motivated students. Over many generations, learning materials that aid the process effectively have been warmly welcomed by students and their teachers (and by patients, who are the ultimate beneficiaries of that knowledge). I remember my own students’ response when I first included illustrations from Gray’s Anatomy for Students in a lecture—afterward, I was asked repeatedly for the source of the marvelous pictures. Looking beyond the “wow” factor that leapt from the pages of the book, it was clear that an enormous amount of thought and skill had gone into producing the artwork.

This atlas contains a series of additional outstanding pieces of anatomical art from the illustrative team of Richard Tibbitts and Paul Richardson that will complement those in Gray’s Anatomy for Students, combined with relevant clinical pictures, surface anatomy, and images from a range of modern imaging procedures. Of course, anatomy cannot be learned from books and interactive DVDs alone, no matter how excellent they may be. Anatomy is a practical subject, best learned by gaining hands-on experience of the body. Students should spend as much time as they can examining cadaveric dissections (if they do not have the opportunity to dissect themselves) and should always read from screen or page with the appropriate bones in front of them. They need to combine and correlate information from a wide variety of sources in order to gain the working knowledge mentioned earlier.

This atlas will provide a valuable companion to their studies, and I am confident that it will remain in their libraries long after they have completed the early stages of their training.

Susan Standring, MBE, PhD, DSc, FKC, Hon FRCS, Emeritus Professor of Anatomy, King’s College, London
FOREWORD

We began working on *Gray’s Atlas of Anatomy* in 2005 following the publication of our textbook, *Gray’s Anatomy for Students*. We wanted to produce an atlas that would build on themes and concepts established in the textbook and that would couple artistic renderings of “internal” gross anatomy with actual “living” anatomy, as visualized with modern imaging techniques and with surface anatomy. We believe that the final atlas, now in its third edition, presents a fresh and integrated approach to anatomy that is accessible to entry-level students in anatomy, as well as to students at more advanced levels.

Because an atlas is used in a much different way than a textbook, we could not simply repackage figures used in *Gray’s Anatomy for Students* and put them in the atlas. Consequently, most of the figures in the atlas are new and were designed to present structures in a more complete context than in the textbook, even though the color palette and overall look of the figures in both the atlas and textbook are similar. Also, figures in the atlas provide additional detail not included in the textbook and directly correlate artistic representations of anatomy with computed tomography (CT) and magnetic resonance imaging (MRI). Where appropriate, we have included endoscopic, laryngoscopic, and laparoscopic views of the anatomy and have included examples of ultrasound images. In a number of regions, we also have reconstructed the internal anatomy of patients by abstracting specific information from multiple MR or CT images, and we present these reconstructions together with artwork of the same anatomy. Although the artwork was done independently of the reconstructed images, the two types of representations are strikingly similar.

Each page of this atlas was planned prior to beginning work on the figures, and all of the artwork was generated digitally. Most of the figures were created from an extensive digital database created for the textbook. In this third edition, we have updated the images and added a few new ones in response to feedback from our readers.

We hope that the textbook and this edition of the atlas used together will provide powerful learning tools for students of human gross anatomy.

The Authors
This 3rd edition of *Gray’s Atlas of Anatomy* continues in the tradition of the first two editions, coupling artistic rendering with actual living anatomy as visualized with modern imaging techniques and surface anatomy. The combination of modern illustrations, imaging, and surface anatomy is unique among atlases available today.

At the end of every chapter, tables and schematic drawings allow for quick review of subject matter. These include major nerves plexuses throughout the body, branching patterns of major arteries, summaries of muscles organized into compartments or regions, and other helpful information. This material is designed to provide the reader quick access to information.

It’s our hope that the 3rd edition of *Gray’s Atlas of Anatomy* will become a valuable learning aid for students encountering anatomy for the first time or for the individual seeking to review information critical to their daily experiences.

The Authors
THE BODY
CONTENTS

Anatomical position, terms, and planes 2
Anatomical planes and imaging 3
Surface anatomy: anterior view 4
Surface anatomy: posterior view 5
Skeleton: anterior 6
Skeleton: posterior 7
Muscles: anterior 8
Muscles: posterior 9
Vascular system: arteries 10
Vascular system: veins 11
Lymphatic system 12
Nervous system 13
Sympathetics 14
Parasympathetics 15
Dermatomes 16
Cutaneous nerves 17