

Second Edition

Anatomy Simplified

Salient Features of the Book

- This book covers both theory topics and practical aspects of anatomy in a comprehensive manner
- Topics in the book conform to the new CBME syllabus: Competency Based Undergraduate Curriculum for the Indian Medical Graduate
- Key to anatomy unfolds all the difficulties in anatomy and within no time you will grasp the subject with confidence
- The language of the book is easy to understand and thus it becomes easy to reproduce in the examination
- Each topic is either covered under key short notes or key long questions
- The book clears the air about how to answer short notes and long questions in the examination
- Students will feel confident about theory and viva voce examinations
- Key diagrams with MCQ tips will assist students in doing the last minute revision before the examination
- Useful mnemonics are given to memorise certain facts in anatomy in a logical manner
- Surface anatomy is made very easy by providing clinical photographs
- There is a separate section on embryology models; expected viva voce questions are discussed following the description of models
- Clinical photographs are also provided for muscle actions of upper and lower extremities
- The book provides anatomy topics with understanding thus making them easy to remember. Almost every topic has easily reproducible diagrams
- Dissection chapter in each section provides the crucial structures encountered in that particular region, with special mention of vivisection, i.e structures encountered during surgery
- The book describes in almost every topic how knowledge of anatomy will help while doing surgery
- Book draws at many places a comparison between dissection on cadavers and surgery performed on patients
- Anatomy is a basic subject in medical education; the book provides ground for strong foundation of knowledge in this subject
- This book will be your best friend in your entire medical career

Lalitha A Kulkarni completed her MBBS and MS (Anatomy) from JIPMER, Puducherry, and MS (ENT) from Government Medical College, Solapur, Maharashtra. She also has to her credit DNB in Anatomy and DNB in ENT. After serving as a senior resident in Department of Anatomy, JIPMER, she worked as assistant professor in various private colleges. While working in surgical field, she experienced the practical application of anatomy and thus strongly felt that students should understand anatomy at the beginning of their medical education. She has received various awards for presentations in anatomy and ENT in various conferences. She is a dedicated teacher working hard to make anatomy a student-friendly subject. She felt the subject of anatomy easy to herself and thus wanted even students to feel it that way; hence she wrote this book *Anatomy Simplified*. At present she is conducting anatomy classes in Mumbai and is also a practising ENT surgeon.



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Kulkarni

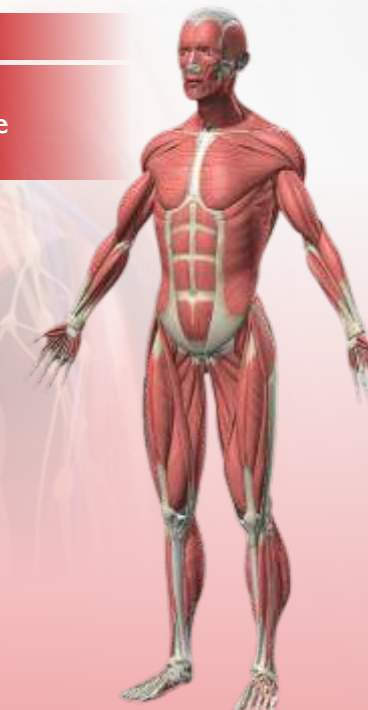


Second Edition



Anatomy Simplified

- Covers extensively theory and practical aspects
- Contents designed as per the latest CBME Guidelines | Competency Based Undergraduate Curriculum for the Indian Medical Graduate



Lalitha A Kulkarni



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to

my mother late Mrs Usha A Kulkarni

who strongly felt education is the real ornament of daughter.

My mother was my first teacher who introduced me to true values of life.

Being poised in every situation of life is the real success of life.

She always said one's hobbies and books are the true companions in life.

MOTHER'S SYMBOL



The central circle represents the Divine Consciousness.

The four petals represent the four powers of the Mother.

The twelve petals represent the twelve powers of the Mother manifested for Her work.

A stylized signature consisting of a horizontal line with a small dot above it and a vertical line extending upwards from the dot.

Aurobindo Ashram, Puducherry

Preface to the Second Edition

The first edition of this book was well accepted by the first year students of all disciplines of medicine; however students felt the need of practicals of anatomy to be dealt with in a similar fashion so that the whole subject of anatomy was made easy and reproducible in exams. Therefore, this second edition not only covers the theory portions but also the practical portions of anatomy. That is the whole of anatomy under one roof!

The subject of anatomy is presented in an organised and a student-friendly manner. As you sail through the book, the whole subject becomes easy.

To begin with, key to anatomy unravels the logic behind the anatomy jargon so that students can easily remember anatomy more by understanding than by rote. Any subject if remembered with understanding is difficult to forget; and anatomy is such a subject which you need to apply all throughout your medical career.

The regions of the body are dealt with under separate sections; for example, upper limb, lower limb, abdomen and pelvis, thorax, head and neck, neuroanatomy, embryology, and histology. Each section splits the regional information by and large in the following format—key osteology questions, key short notes, key long questions, key diagrams with MCQ tips, MCQs, dissection of that particular region, osteology in detail again and the section ends with surface anatomy. The chapter on dissection deserves a special mention; after reading this chapter an apparent comparison can be drawn with live surgeries. In the chapter on dissection, incision markings are given in the form of schematic diagrams and then notes are provided regarding the crucial structures encountered in that particular region. A special term vivisection introduced under this chapter will assist the student to understand that dissection on cadavers and operations carried on patients are similar. Many a time postgraduate students pay through their nose for workshops to learn surgeries, and miss this opportunity in dissection hall to practise dissection on cadavers. Master in dissection and you will be master in surgery. Another section which needs a special mention and is dealt with differently is surface anatomy, I have not only provided the points to be marked on the body of a living subject theoretically but also shown the same on the living subject by means of clinical photography. This section gives you an edge over layman in the first year of your medical profession itself. It makes the anatomy subject lively and interesting. There are times in *viva voce* when you are asked to demonstrate muscle actions of extremities. In reply, clinical photographs are provided depicting particular muscle action.

To meet the need of the hour, i.e. to fair well in competitive exams, the region wise MCQs and key diagrams with MCQ tips are also provided. This chapter revision just before any exam (class test, university exam, PG entrance, or DNB exam) will make students confident to face the exams.

Another challenge in anatomy is embryology, this book covers the same mostly in a Socratic method. Practical of embryology are given in the form of pictures for embryology models. One part of embryology model is unlabelled and the other is labelled. Students will get a feel of exam when they see the unlabelled model and they can practise answering the model.

Anatomy is a vast subject to remember and reproduce in exams. Apart from making the language of anatomy easy I have provided mnemonics here and there to remember topics in sequence.

Special emphasis on illustrations which form the cornerstone of anatomy memory is given for each topic. Anatomy can be best remembered by drawing diagrams.

The book ends with literal meanings of Greek and Latin words used in anatomy.

Overall personally I want every student to breeze through medical career and enjoy anatomy subject. This is my modest intention behind writing the book *Anatomy Simplified*.

Please remember dear students "What man has done man can do."

Lalitha A Kulkarni

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Preface to the First Edition

A *natomy Simplified* is a book meant for students of 1st year MBBS, dental, ayurvedic, homeopathic and students preparing for entrance examinations. Since the book also deals with surgical anatomy, it will be useful for students doing postgraduation in surgical discipline.

The book covers examination-oriented topics in Socratic method, in the form of 'questions and answers'. The book prepares the students even for 'viva voce' and makes students feel confident to appear for the examinations.

Certain topics like, neurobiotaxis, humeral torsion, surgical anatomy, and hearsay topics dealt in dissection hall are also covered up in the book. Key diagrams, which form the basis of the book, will make it simple to remember 'anatomy'.

Most of the sections are arranged into five chapters namely Key Questions, Short Notes, Long Questions, Key Diagrams with MCQ Tips and MCQs, which will enable the students to prepare for all types of examinations including *viva voce* and to acquire knowledge in a simple and systematic way. Separate Glossary for Neuroanatomy section is given considering its importance. Sections VII and VIII deal with Embryology and Histology. Section IX deals with the meanings of few Greek and Latin words used in anatomy.

Always a subject studied in own language is easy, similarly an attempt is made to make 'anatomy language' easy. It is difficult to make the subject easy, but if the student adopts right method of learning, it becomes *Anatomy Simplified*.

Lalitha A Kulkarni

Acknowledgements

At the outset, I express my deep gratitude to my father, Shri Arvind Gajanan Kulkarni, who has been a constant source of inspiration all throughout my educational journey. He told me stories of my grandfather who was a schoolteacher in a small village of Satara (Maharashtra) and who walked miles to take home tuitions. My father feels women education is the only ladder to uplift the status of women in society. He always tells me, be positive in every situation of life. Positive attitude is in his blood (his blood group is also B+); he also has a subtle sense of humour and these are his secrets of successful life. It is only because of my father what I am today!

The next person who was directly involved in my book project is my husband, Shri Hemant Joshi, a Chartered Accountant, LLB by profession; who spared time even at odd hours to help me. He always encouraged me to devote time on priority to my book. Without his support this project would not have seen light of the day.

I thank my all teachers throughout my medical career who not only critically acclaimed my educational achievements but also blessed me in my every venture.

I shall remain indebted to all the staff of CBS Publishers and Distributors for their painstaking efforts to make my dream into reality.

Last but not the least I am indebted to all my students who have been the real reason behind the genesis of this book. It is only because of the love of students and my desire to fulfil their requirements of the subject I could pen down this book *Anatomy Simplified*.

Lalitha A Kulkarni

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