

# CASES

## Clinical Assessment and Examination Simulation in Orthopaedics

Postgraduate students, who have plenty to remember and revise in their final stages of exam preparation and consequently during their crucial practical examinations, are unable to precisely answer what an examiner expects for a particular case scenario.

*Recreating the examination hall scenario and simulate what transpires during those few hours between the student and the examiners is the main aim of this book.*

The 80 long and short cases, along with chapters on spotters and goniometry, form the content of this book. Chapters include many relevant photographs and X-rays which help in understanding the difficult concepts. Each chapter is a condensation of cardinal information required to be presented in the examination. The book will serve as a valuable resource for presenting cases during the routine ward rounds or teaching sessions to both the postgraduates and the faculty.

The book will find relevance when the readers understand what exactly the faculty or the examiner expects and learn to highlight crucial clinical findings which will clinch the case for them. This is demonstrated in various sections of the chapters which start with actual case scenarios, describe the core clinical findings, how exactly to articulate the final diagnosis with points in favour, formulate the management, and outline the principles of treatment.

*... a must for every student striving to clear his/her postgraduate examination in orthopedics with zen and confidence ...*

**Anil K Bhat** MS (Ortho), DNB (Ortho), MNAMS

is currently Professor and Head, Department of Hand Surgery, and Associate Dean, Kasturba Medical College (KMC) and Hospital, Manipal, Manipal Academy of Higher Education—the topmost Indian private university in QS world ranking 2022. He has immense interest in undergraduate and postgraduate teaching, clinical practice, research and academic activities.



His passion for teaching takes him across India to numerous teaching programs. He has been honored with “Excellence in teaching” and “Distinguished alumnus” awards by KMC, Manipal. He conducts basic and advanced teaching courses in his specialty of hand surgery all over India and has guided many dissertations, PhD theses and research scholars, and is presently the editor of *Karnataka Orthopaedic Journal*. During his tenure as head of the department, and as postgraduate examiner to various universities across the country, he always felt the need for compilation of clinical cases to guide postgraduate students in their preparation for practical examinations.

Prof Bhat has to his credit more than 85 papers published in national and international journals, various chapters in books, research projects, academic and innovation awards. His dedication to teaching is his paramount priority and this book is born out of that.



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Second Edition

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CASES Clinical Assessment and Examination Simulation in Orthopaedics Bhat

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## Clinical Assessment and Examination Simulation in Orthopaedics



Anil K Bhat



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**Second Edition**

# **CASES**

**C**linical **A**ssessment and  
**E**xamination **S**imulation in  
Orthopaedics

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### *What the Readers have Commented on the First Edition...*

I would like to thank Dr Anil Bhat sir for the wonderful book *CASES*, first edition. It helped me immensely during my practical exams making difficult and confusing concepts crystal clear. This book covers clinical aspects comprehensively with emphasis on systematic examination of common cases we encounter in our practical exams and day-to-day practice. Answers for most likely asked postgraduate practical questions are mentioned precisely. I would recommend *CASES*, 2nd edition to all the orthopaedic junior residents.

**Dr Darshan N** MBBS MS

Clinical Fellow in Robotic  
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A few books help aspiring orthopaedic residents as much as the *CASES*. It gave me the foundation and knowledge required for clearing my MS and DNB Practical exams in the very first attempt with good marks. Comprehensive and easily understood, the practical-based scenarios and images helped me build my core skills, enabling me to win the Gold Medal in exam by Kerala Orthopaedic Association in 2020.

An essential advice more than a recommendation, *CASES* has been a revelation.

**Dr Afsal VP**

Consultant Orthopaedic Surgeon  
Asten Speciality Orthopaedic Hospital, Calicut

*CASES* by Dr Anil K Bhat is a unique book that crisply covers long and short cases that a postgraduate orthopaedic resident is likely to come across in MS/DNB practical examinations. It serves as a ready reckoner, succinctly covering the clinical approach to a case, with a background of numerous well-illustrated clinical tests, making it a must have book for all exam-going postgraduate residents as well as practising orthopaedic surgeons who would like to review clinical concepts.

**Dr Nishant Mirchandani**

Senior Resident  
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One of the study materials that remained constant with me throughout my journey was *CASES*. This book enabled me to analyse each case from a different perspective and took my preparation to a completely new level. Clinical presentation with images attached along with it made it easier to grasp and strengthen all the concepts to its core. *CASES* played a major role in achieving Gold Medal for my MS (Ortho) finals. I recommend this valuable study material to all the aspiring orthopaedic postgraduates.

**Dr Fijad NR**

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**Second Edition**

# CASES

## Clinical **A**ssessment and **E**xamination **S**imulation in Orthopaedics

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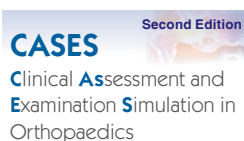


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## Foreword

**L**earning orthopaedics is a lifelong exercise and clearing the examination is but a step to certify that the resident has the skill to perform clinical and surgical work. Right clinical assessments result in good clinical outcomes. This clinical evaluation has sadly taken the back seat with the onset of investigations and multiple choice-based performance assessment. It is in this context that a step-by-step, hand-holding approach, by a senior teacher, benefits the student and reduces errors. This book fills this vacuum.



It is cliché that practicing medicine is an art and a science. However, teaching medicine needs scholarship and a passion for excellence. Prof (Dr) Anil K Bhat, an astute clinician, provocative teacher and a skilled surgeon has combined all these faculties to become a teacher of repute. Carrying on the mantle from his teachers, he has made teaching orthopaedics to residents and undergraduates a passionate endeavour.

Examinations and periodic assessments are these days, as per norms, objectively assessed. The overwhelming sense of anxiety prior to an examination is relieved partly by a good mentor and better still, by a well written, concise, easy to read, well-illustrated book. The teachers of yore conducted 'clinics' that we remembered for a lifetime. A book on systematic clinical assessment and comprehension of case scenarios is the best alternative to fill the void of teachers with a 'clinical' orientation.

This book is the need of the hour. The present day postgraduate residents, having come through multiple choice question based exam pattern, have not been trained in the art of clinical examination, discussion, discernment, documentation, deliberation and counselling. The medical profession, especially orthopaedics, is in the consumer service sector, is open to litigation and intense scrutiny by the insurance and regulatory bodies. An increasing number of so called 'medically literate or learned' have been judging the actions of doctors, empowered by knowledge from internet sources and hence there is a little margin for error.

This book empowers the resident with a systematic, methodical approach to orthopaedics. It will help learn the anatomical basis of procedures and clinical techniques. Clinical examination should be a ritual and each step in this drill adds a valid point to arrive at a diagnosis. Learning clinical skill involves a thorough, logical, scientific and deductive approach based on symptoms and signs. The presentation of a clinical case in the examination, by the resident, must be based on these principles. Each chapter has alluded to this in a clear and concise manner. The illustrations are self-explanatory and will help visualise the patient in front of you. The basics of cognition, conation and expression are blended beautifully in this book. This book should be a good ready reference for undergraduate students, postgraduate residents and practitioners alike.

I wish Dr Anil, the blessings of the Almighty and God's wisdom, to accomplish this noble endeavour to create a new generation of accomplished orthopaedic surgeons.

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Head, Department of Orthopaedics and  
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- Contributing authors and other departmental colleagues for their helping hand. The contributing authors who have helped me to assimilate and compile many of the chapters are Dr Ashwath Acharya (nerve injuries, tumour, rheumatoid and deformity-related chapters), Dr Sandeep Vijayan (adult hip-related chapters), Dr Hitesh Shah (paediatric hip- and deformity-related chapters), Dr Shyamasunder Bhat (deformities and complications of fracture-related chapters), Dr Vivek Pandey (shoulder- and knee-related chapters), Dr Madhav Pai K (spine-related chapters), Dr Sandesh S Madi (knee-related chapters), Dr Mithun G Pai (spotters), Dr Prajwal Prabhudev Mane (goniometry) and Dr Monish Malhotra (ankle-related chapter).
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- Patients, towards their co-operation for photographs.

**Anil K Bhat**

## Preface to the Second Edition

---

The second innings of my book *CASES* is about to begin, and I feel like a proud parent who is witnessing my child's growth. The immense and overwhelming response received for the first edition has affirmed my responsibilities as a teacher and has inspired me to write more. Hence, this second edition with many new chapters, which I felt, is of a greater need for the postgraduates.

Each time a budding orthopaedic surgeon communicates back reflecting on his/her experiences like understanding the concepts adequately, better performance in exams, and even securing a distinction or a gold medal, I feel the vision of this book is on the path of its achievement.

"An approach to bilateral hip case" is the main attraction of this second edition, comprehending the controversies surrounding this topic. I have tried to clarify my best on the concepts of presenting such a case. The other major addition is the spotters of upper and lower limb cases displayed in some exams.

The addition of these new chapters and incorporating the feedback from the readers on the first edition will help the postgraduate students refine their performance and enhance their confidence as orthopaedic surgeons.

I thank all my co-authors, my family and the publishing team for their contribution and support in bringing out this second edition of *CASES*.

**Anil K Bhat**

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## Preface to the First Edition

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After teaching orthopaedics for the last two decades to my postgraduate students, being a faculty in numerous teaching programs and also as an examiner, I have come to realize that many a time, the student is unable to convey the most relevant points for a particular case to aid in the diagnosis or management even though he/she knows all about it. This compilation of clinical cases is aimed at achieving that.

Postgraduate students will find this book useful at the final steps leading to their practical exams. The book is not aimed at teaching every detail of clinical examination for which numerous resources are already available. The book works on the premise that a student knows the clinical examination methods of different case scenarios but will be guided to assimilate that knowledge into presenting in a real-time examination framework.

Every step of a given chapter in this book follows the same sequence of exam hall scenario and simulates what transpires during those few hours between the student and the examiners. To this extent, I have been almost accused in a lighter vein of giving away the secrets of postgraduate examination by those who have reviewed the chapters written for this book.

The chapters presented here reflect the vast experience of my co-authors towards whom I express my immense gratitude for sharing their valuable time for this compilation of clinical cases. My family, who always have been a strong pillar of support deserves my indebtedness. Many of my former postgraduate students have provided critical feedback which has assisted in polishing the chapters to a great extent. The publishers and their team have been very patient and extremely supportive throughout this endeavour. The supreme inspiration for this work comes from my love for teaching and I wish to remain a teacher all my life.

**Anil K Bhat**

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