

Textbook of Medical Virology

Second
Edition

is an updated, enlarged and thoroughly revised edition that describes all the medically relevant viruses, including the recent SARS CoV-2. It aims to serve as a comprehensive textbook on medical virology for students pursuing MBBS and postgraduate courses in medical microbiology/ virology/ infectious diseases (MD, PhD, DM, MSc). It will also serve as a handy reference for the practising medical microbiologists and virologists.

Highlights of the Second Edition

- Seven more chapters have been added to give a holistic picture of all the medically important viruses.
- Updated information on epidemiology, pathogenesis, diagnostic guidelines and vaccines
- Special importance to Indian epidemiology.
- A detailed chapter on Covid-19 (SARS CoV-2).
- All important topics have been described in lucid and comprehensive manner with up-to-date information from articles published in reputed journals and highly regarded reference books.
- Colour illustrations, photomicrograph and images have been included to build clear concepts and to aid the learning process.
- Tables, line diagrams, flowcharts and diagnostic algorithms are given to simplify the understanding, emphasise the important points and revise the facts quickly and easily.

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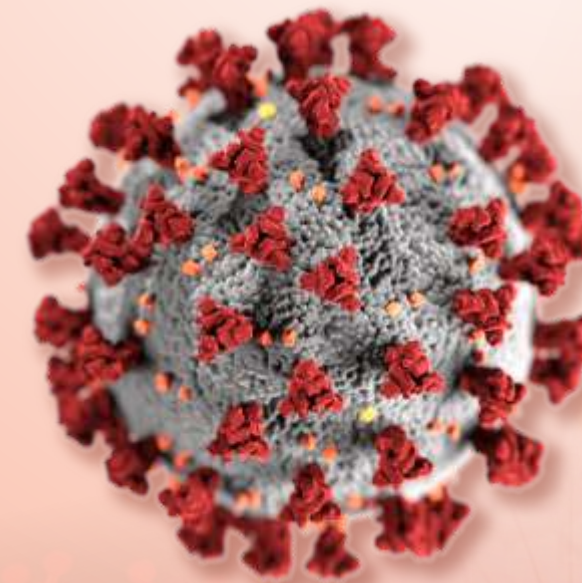
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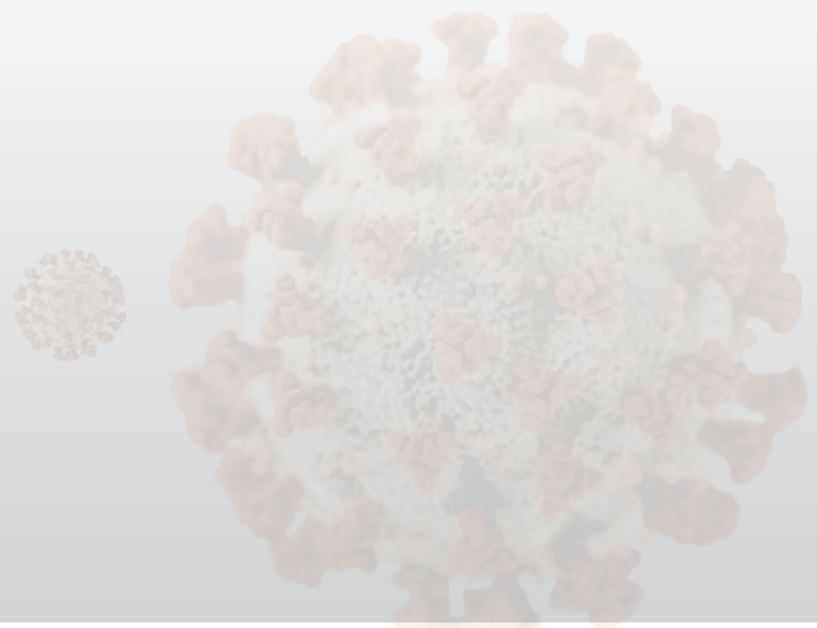
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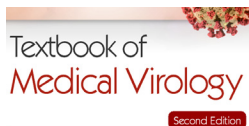


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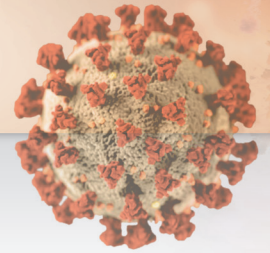
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to

my parents

*Lt Dr Manisha Mishra and
Lt Shri Sarada Prasad Mishra*

Preface to the Second Edition



It gives me immense pleasure to announce the much awaited release of the second edition of *Textbook of Medical Virology*. This edition was scheduled to be released in 2020, but the emergence of COVID-19 put the work on hold.

The emergence of SARS coronavirus 2 seized the entire world in its grip. In the history of mankind, for the first time, the entire world locked itself behind doors. Life became standstill. Hospitals got closed for non-COVID cases, students were sent back to their homes, medical teaching moved from classrooms and clinics to online. The fear of COVID-19 throbbed in every individual's heart. The importance of viruses, viral infections is now realized by every human being, every section of society, every country, and has spread beyond the medical fraternity.

Additional features of second edition

- Seven more chapters have been added to give a holistic picture on all medically important viruses.
- Updated information on epidemiology, pathogenesis, diagnostic guidelines and vaccines in existing chapters.
- Special importance to Indian epidemiology.
- A detailed chapter on COVID-19 (SARS-CoV-2).

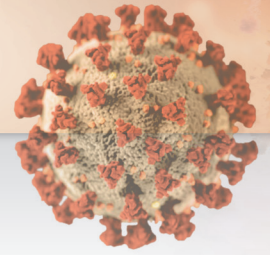
The texts have been described in lucid and comprehensive manner with up-to-date information from articles published in reputed journals and highly regarded reference books. It has colored illustrations, photomicrograph, and images to make the chapters interesting. The tables, line diagrams, flowcharts and diagnostic algorithms are given to simplify the explanation, and easy to revise for the students.

A sincere attempt has been made to present the viral infections in a lucid manner. The approach is to build the concept, to provide the insight into the clinical approach and interpretation of viral diagnosis. Like the viruses, virology is often considered as a difficult and dreaded subject by most of the students. This book is a sincere approach to make the virology learning simpler.

I believe this book would fulfill the need of both MBBS and postgraduate students and teachers.

Baijayantimala Mishra

Preface to the First Edition



Since the beginning of the 21st century, world has witnessed the threat of numerous viral infections. The emergence of several novel viruses including some of the deadly viruses such as SARS, bird flu, influenza A (H1N1), and MERS has made the world realized the importance of viral infections. The threats continued with Ebola which devastated Western Africa, crossed the continent for the first time and put the whole world on alert. Outbreaks of dengue, chikungunya and Japanese encephalitis have become serious concern every year worldwide. The problem of arbovirus has now been compounded with emergence of Zika virus and has posed a serious diagnostic challenge for the microbiologists. The increasing number of immunocompromised patients has created a pool of susceptible population for various viral infections posing a challenge for early diagnosis and management. Moreover, the availability of antivirals and better diagnostic techniques for early detection has made the clinical virology more important than ever before. The increased clinical importance of viral infections in past few years has increased its demand tremendously in the medical teaching.

The present book contains all medically important viruses. The approach of the book has been made from a clinical perspective. Each chapter covers all relevant aspects of the viral infection with special emphasis to recent classification, molecular epidemiology, transmission cycle, pathogenesis, diagnostic approach with clinical interpretation, antivirals and vaccine. The texts have been described in clear and comprehensive manner with up-to-date information from articles published in reputed journals and highly regarded reference books. It has self-explanatory color figures and graphs, photomicrograph, images, tables, flowcharts and diagnostic algorithms. Some of the chapters (Chapters 8–10) have been presented according to their clinical manifestations and diagnostic approach.

A sincere attempt has been made to fulfill the wholesome need for concept building, clinical approach and interpretation of viral diagnosis. I believe this book should fulfill the need of both MBBS and postgraduate students.

Baijayantimala Mishra



Acknowledgments

The first edition was prepared with lots of apprehension and speculations. After the release of the first edition, the book was liked by students and received appreciation from my teachers who are renowned virologists of the country. This encouraged me to continue my work, which has culminated in this second edition.

Though the second edition was scheduled to be released in 2020, the emergence of COVID-19 delayed the process and put the things in uncertainty. With God's grace and the blessings of my teachers, I believe it is finally time for the second edition.

My heartfelt thanks to my friend Dr Niveita Karmee for her valuable help in correcting English and grammar in the additional chapters of this edition.

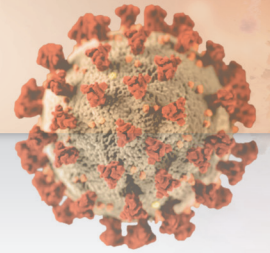
My sincere thanks to Mr YN Arjuna Senior Vice President—Publishing, Editorial and Publicity, CBS Publishers & Distributors Pvt. Ltd., and his publishing team for all their cooperation.

I extend my thanks to all those who had helped me for the first edition of this book.

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