

# Hematology

for Students and Practitioners *Including Practical Hematology*

The art-and-science of studying and diagnosing problems related to blood, the connective tissue of our body, has seen a sea-change during the last century and about a quarter of this century. In short, blood is the lifeline of human body. Blood assists in diagnosing most of the ailments that afflict the human body and also serves as the vehicle for infusing life-saving medicines too. It is also the army and navy of any living being, always ready to supply the fighting force—a line of defense in the microphages—better known as neutrophils. All antibodies are suspended in it too.

The book presents all the three cell lines, related disorders and their diagnostic protocols. If a disease presents with any change in hematological parameters, it is suitably and amply covered within the covers of this book. Not forgotten are the clotting mechanisms, the blood banking line, nor has the hemoparasitology been ignored. The hemo-malignancies are presented in desired details. Not much has changed in the last decade in treating leukemias in any case.

Last three years brought to the fore COVID, though still being discussed in the journals in the form of articles and papers, the basic accepted changes that blood undergoes have been lucidly introduced in the last chapter.

Not to forget the **practical hematology**, which was always an integral part of the previous six editions, has been duly presented too.

So if you are an undergraduate or postgraduate medical student, or a technologist running a clinic-side laboratory—**THIS BOOK IS FOR YOU!**

In the current century, automation has taken over to a great extent, however, unless one understands the basics and primary testing procedures one cannot grasp what a machine is doing and how. So tests of yesteryears are very much a part of this book as are random access walk-away automated systems.

From alpha to zeta of haematology is waiting to grab your kind attention, flip through the pages and enjoy an easily assimilable knowledge experience.

**Ramnik Sood MD** is an eminent, internationally acclaimed medical author and has scores of books to his credit especially on medical laboratory technology and allied health sciences. He has also written over 150 techno commercial journals for *in vitro* diagnostic industry and medical group chains. This book is the seventh edition under this title and has been popular for over three decades. It has been much appreciated for its comprehensiveness and ease of understanding, both by undergraduate and postgraduate students and practitioners alike. You may search RAMNIK SOOD on the Net to fathom his contribution as an author to the medicos worldwide.

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Haematology  
for Students and Practitioners  
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E-mail: delhi@cbspd.com, customercare@cbspd.com; Website: www.cbspd.com  
New Delhi | Bengaluru | Chennai | Kochi | Kolkata | Lucknow | Mumbai  
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# Hematology

for Students and Practitioners

*Including* Practical Hematology

**Ramnik Sood**

MBBS, PGen&OH, MD (Path) Gold Medalist  
Director, Speciality Diagnostic Labs, Panaji, Goa  
Consultant 'A', UAE  
Former Senior Visiting Consultant  
Manipal Health Systems  
(Manipal Group)  
Bengaluru, Karnataka

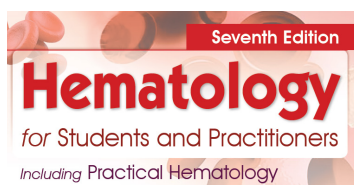


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4819/XI Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110 002, India

Ph: 011-23289259, 23266861

Website: [www.cbspd.com](http://www.cbspd.com)

e-mail: [delhi@cbspd.com](mailto:delhi@cbspd.com)

**Corporate Office:** 204 FIE, Industrial Area, Patparganj, Delhi 110 092, India

Ph: 011-4934 4934

Fax: 011-4934 4935

e-mail: [publishing@cbspd.com](mailto:publishing@cbspd.com); [publicity@cbspd.com](mailto:publicity@cbspd.com)

#### Branches

- **Bengaluru:** Seema House 2975, 17th Cross, KR Road, Banasankari 2nd Stage, Bengaluru 560 070, Karnataka, India  
Ph: +91-80-26771678/79 Fax: +91-80-26771680 e-mail: [bangalore@cbspd.com](mailto:bangalore@cbspd.com)
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- **Kochi:** 42/1 325, 36, Power House Road, Opposite KSEB, Kochi 682 018, Kerala, India  
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- **Kolkata:** C/o Hind Ceramics Compound, 1st Floor, 147, Nilgunj Road, Belghoria, Kolkata 700 056, West Bengal, India  
Ph: +91-33-25633055/56 e-mail: [kolkata@cbspd.com](mailto:kolkata@cbspd.com)
- **Lucknow:** Basement, Khushnuma Complex, 7-Meerabai Marg (behind Jawahar Bhawan), Lucknow 226 001, Uttar Pradesh, India  
Ph: +91-522-4000032 e-mail: [tiwari.lucknow@cbspd.com](mailto:tiwari.lucknow@cbspd.com)
- **Mumbai:** PWD Shed, Gala No. 25/26, Ramchandra Bhatt Marg, Next to JJ Hospital Gate No. 2, Opp Union Bank of India, Noorbaug, Mumbai 400 009, Maharashtra, India  
Ph: +91-22-66661880/89 e-mail: [mumbai@cbspd.com](mailto:mumbai@cbspd.com)

#### Representatives

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to  
my father





## Preface to the Seventh Edition

The art and science of studying and diagnosing problems related to the red liquid connective tissue of our body has seen a sea change in the last century and about a quarter of this century. While importance and relevance of brain, heart, nerves, musculoskeletal system cannot be undermined, the logistical system of human body that carries nutrients, energy, micronutrients from the source of procurement/absorption to their processing organs and thereafter to every cell of the human body for eventual usage and subsequently gathering of wastes created to the end clearing and disposing organ of the body just cannot be overlooked. It is called blood. Blood which on the shirt or on the road signifies bad omen but the same flowing nicely through the vasculature signifies life. Stoppage of blood supply implies the ultimate end of our body and all that works within it.

In short, blood is the lifeline of a human body. It also assists in diagnosing most of the ailments that afflict to a human body and also serves as the vehicle for infusing lifesaving medicines too. It is also the army and navy of any living being, always ready to supply the fighting force—a line of defense in the microphages—better known as neutrophils. All antibodies are suspended in it too.

In the current century, automation has taken over to a great extent; however, unless one understands the basics and primary testing procedures, one cannot grasp what a machine is doing and how. So, tests of yesteryears are very much a part of this book as are random access walk away automated systems.

The book presents all three cell lines-related disorders and their diagnostic protocols. If a disease presents with any change in hematological parameters, you will find it suitably/amply covered within the covers of this book. Not forgotten are the clotting mechanisms, the blood banking line, nor has the hemoparasitology been ignored. The dread creating hemomalignancies are presented in desired details. Not much has changed in last decade in treating leukemias in any case.

Last three years, brought to the fore coronavirus disease (COVID), though still it is being discussed in journals in the form of article; however, basic accepted changes that blood undergoes have been lucidly introduced as the last chapter.

Not to forget the practical hematology that was always an integral part of the previous six editions always has been duly presented too.

So, if you are an undergraduate/postgraduate student or a technologist running a clinic-side laboratory—*This book is for you!*

From *alpha to zeta of hematology* is waiting to grab your kind attention, flip through the pages and enjoy an easily assimilable knowledge experience.

Happy reading !!!

**Ramnik Sood**







## Preface to the First Edition

**M**edical book writing is basically an editing work. The voluminous textbooks are prepared from thousands of published articles, and the not so voluminous books (like the one you are holding) are prepared to provide 'longer acting (retainable) substance with a lesser dosage'. This book, though cheap cost-wise, is rich in its contents. Care has been taken not to miss any topic of use either in examinations or in practice. The systematic format and the presentation is easily palatable. Wherever necessary a list of normal relevant values has been given, the figures need no legends, as they are self-explanatory. I do claim that this book is more than sufficient for undergraduate theoretical and practical hematology. I hope that the red liquid blood presented here quite solidly in black and white would go a long way both for students and for the aware practitioners. Suggestions for improving the next edition would be gratefully accepted and appreciated.

**Ramnik Sood**





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