

ECHO MADE EASY



System requirement:

- Windows XP or above
- Power DVD player (Software)
- Windows media player 10.0 version or above (Software)

Accompanying CD Rom is playable only in Computer and not in CD player.

Kindly wait for few seconds for CD to autorun. If it does not autorun then please do the following:

- Click on my computer
- Click the **drive labelled JAYPEE** and after opening the drive, kindly double click the file **Jaypee**

CD CONTENT

- Procedure on how to perform an Echo?

ECHO MADE EASY

Second Edition

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Echo Made Easy

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To
My Father
Mr PP Luthra
who made me
&
to
My Mother
Ms Prem Luthra
whose fond memories
always guide me

PREFACE TO THE SECOND EDITION

As I write this preface to the second edition of *Echo Made Easy*, my thoughts go back to the time when I was skeptical about authoring this book. My concerns were whether there was a genuine need for it and whether I was the right person to write it. But thanks to my readers for their appreciation, my publishers for their support and my father for his encouragement, it gives me immense pleasure to pen down the introduction to this vastly improved version of *Echo Made Easy*.

First attempts are seldom the best as there is always a scope for improvement. This was aptly pointed out by my critics and colleagues. Therefore, the text has been changed into a bullet-point format to improve readability and recall. The illustrations and figures have been redrawn by my expert artist and do appear strikingly more impressive. Colour-flow maps have now been depicted in true colours, as they appear on the screen during echocardiography. These are bound to leave a lasting impression on the reader's mind.

Colour-Doppler Echo, a recent advancement in echo-technique, did not get its due importance in the earlier edition. An entire new chapter has therefore been incorporated on this intriguing subject, adequately supported by coloured illustrations.

I sincerely hope to continue to receive my share of bouquets and brickbats because only they can spur me on to improve even further. Do keep pouring in your comments and criticisms and wish you a pleasant journey through this unique book.

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PREFACE TO THE FIRST EDITION

Ultrasound has revolutionized clinical practice by providing the fifth dimension to physical examination after inspection, palpation, percussion and auscultation. Echocardiography is the application of ultrasound for examining the heart. It is a practically useful, widely available, cost-effective and non-invasive diagnostic tool. Usage of echo is rapidly expanding with more and more clinicians requesting for and interpreting it to solve vexing clinical dilemmas.

While I was preparing the manuscript of this book, many a time two questions crossed my mind. First, Is such a book really required? And second, —Am I the right person to write it? At the end of the day, I somehow managed to convince myself that a precise and practical account of echocardiography is indeed required and that an academic physician like myself can do justice to this highly technical subject.

The book begins with the basic principles of ultrasound and Doppler and the clinical applications of various echo-modalities including 2-D echo, M-mode scan, Doppler echo and colour-flow mapping. This is followed by an account of different echo-windows and normal echo-views along with normal values and dimensions. The echo features of various forms of heart disease such as congenital, valvular, coronary and hypertensive disorders are individually discussed. Due emphasis has been laid on pitfalls in diagnosis, differentiation between seemingly similar findings, their causation and their clinical relevance. Understandably, figures and diagrams can never create the impact of dynamic echo display on the video-screen. Nevertheless, they have been specially created to leave a long-lasting visual impression on the mind. In keeping with the spirit of simplicity, difficult topics like complex congenital cardiac

X**Echo Made Easy**

disease, prosthetic heart valves and transoesophageal echocardiography have been purposely excluded.

This book is particularly meant for students of cardiology as well as keen established clinicians wanting to know more about echo. If I can coax some physicians like myself to integrate echocardiography into their day-to-day clinical practice, I will feel genuinely elated for a mission successfully accomplished.

Atul Luthra

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- My school teachers who helped me to acquire command over spoken and written English language.
- My professors at medical college who taught me the science and art of clinical medicine.
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- Authors of books on echocardiography to which I referred liberally while writing the manuscript.
- M/s Jaypee Brothers Medical Publishers (P) Ltd who felt confident to assign this project to me and provided expert editorial assistance at all stages.
- My wife Arti and daughters Ankita and Aastha who left me to myself while preparing and finalizing the manuscript of the book.
- My readers who appreciated the first edition of the book and encouraged me to improve it further.

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