Book Review

"A Sonographer’s Guide to the Assessment of Heart Disease" has been written by very well-known and respected echo educator, Bonita Anderson. Bonita is a Senior Lecturer in Cardiac Ultrasound at the Queensland University of Technology, Brisbane, Australia with over 30 years experience as a sonographer and educator in echocardiography at The Prince Charles Hospital, Brisbane. An Accredited Medical Sonographer with a Diploma in Medical Ultrasonography (Cardiac) and a Master of Applied Science (Medical Ultrasound), she was awarded a Fellowship of the American Society of Echocardiography in 2009. Bonita’s aim was to “provide a comprehensive review of transthoracic echocardiography in the assessment of various cardiac pathologies” and she has achieved this. This text is an inclusive echocardiographic reference relevant to students, qualified cardiac sonographers and indeed any health professional with an interest in echocardiography.

The text is hard covered, A4 size of 500 pages with a clear index. Topics covered in the 15 chapters include basic haemodynamic calculations, assessment of systolic and diastolic ventricular function, hypertensive heart disease, ischaemic heart disease, cardiomyopathies, valve disease, prosthetic valves, diseases of the aorta, pericardial disease, cardiac masses and endocarditis, cardiac manifestations of systemic disease and an introduction to congenital heart disease.

Each chapter begins with a summary of the applicable cardiac anatomy and physiology, includes measurement techniques and their limitations, technical tips for obtaining accurate measurements, and concludes with a summary of key points and a further reading list.

The strength of this book is in its clear expression and demonstration of commonly encountered cardiac pathologies. A good example of this is the chapter on "Aortic Valve Disease". It begins with anatomy of the valve and root with diagrams and pathological examples to illustrate the text. Aortic stenosis is described and explained also with diagrams and pathological specimens. There are echo examples and descriptions of the measurements and calculations required to assess the valve, including the use of stress echo. The section on Aortic regurgitation follows a similar format.

The chapter “IHD” succinctly links the coronary circulation with echocardiographic views and demonstrates the potential complications of coronary artery disease.

Throughout the book there are exceptionally good illustrative, pathological examples. Real-time echo clips of the Figures are available via the website www.echotext.info (The website is currently under construction)

Of particular interest are technical tips and vignettes interspersed throughout the text giving rapid insights into selected topics.

The appendices are extensive and useful indicating, prosthetic valve values, congenital heart defects in genetic syndromes, diagrams of palliative and corrective operations for congenital heart defects, reference tables and a comprehensive glossary of terms.

Although it was noted that 3D and global longitudinal strain are new technologies and therefore not discussed in this book, it may have been pertinent to mention the use of 3D and bi-plane imaging in mitral stenosis for more accurate valve area planimetry measurement and of 3D and GLS in the assessment of left ventricular systolic function.

I am pleased to have Bonita’s second book in our department. “A Sonographer’s Guide to the assessment of Heart Disease” will be a welcome addition to any echo reference library for sonographers in clinical practise.

Catherine Mylrea AMS
Echo Educator
MonashHeart, Victoria

The Society would like to thank Catherine for providing this book review.