

The following book review of *A Sonographer's Guide to the Assessment of Heart Disease* has been taken from <http://www.picsa.org.au/> and reproduced permission.

Book Review:

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From the contents page this text seems to cover the main pathologies sonographer's see in every day clinics.

Of note, importance has been placed on detailing uncommon pathologies such as systemic diseases and congenital pathologies. Even in adult echo labs sonographers need to be aware of these "foreign pathologies" and although not commonly seen we do however, see post repairs of congenital pathologies in early adult life and need to be able to understand complex pathologies.

As the author states in her introduction, congenital pathology is a complex topic and there are many other texts on the market specialising in this for those who work with paediatrics or are interested in congenital pathologies. However, extensive coverage has been given to topics seen in the adult labs on a more common basis such as shunts and valve abnormalities in a well presented and detailed manner.

There are many detailed pictures of specimen images compared to Echocardiogram images and this gives the reader a good impression of how structures actually look in the 3D human body. From a practical learning perspective this really adds outstanding value to this text.

The author makes a point of going back to the basic's (or should I say absolute fundamentals) of Physics and LV systolic function. If the sonographer does not have an understanding of these fundamental principles which are the building blocks to understanding Echocardiography, progression to being a great sonographer will be difficult, and as these principles are used every day there is a need to be refreshed in them.

The author has done an exceptional job at explaining Diastolic function, a sonographer's favourite subject? This is accomplished by outlining the step by step process to analysing Diastology which can be very difficult at times to accurately assess.

The schematic illustrations of the regional wall motion/ischaemic maps with the corresponding ECG lead changes are a very helpful, especially for students who are trying to understand coronary artery disease in conjunction with matching regional wall motion abnormalities.

Of course the bread and butter of adult Echocardiography, being mitral and aortic valve diseases, is covered in significant detail. The anatomic illustrations and cadaver specimen images perfectly demonstrate these valve pathologies and give the sonographer a much clearer appreciation of the valve anatomy and function of the valve with certain pathologies.

The "forgotten" valves, the Tricuspid and Pulmonary valves cannot possibly be forgotten now with such detailed yet simplified chapters regarding these valve pathologies.

The images of the Prosthetic valves are very helpful especially with the progression of technology in this area, it certainly helps the Sonographer understand what the valve looks like when imaging and can give a better understanding of the expected haemodynamics.

The chapter on pericardial disease and changing pressures (as in Tamponade) is a chapter Sonographer's have been needing for some time. Tamponade can be very confusing when trying to understand what happens to the pressures inside and outside of the heart and the schematic diagrams used really help the reader to understand this phenomenon.

Have you ever seen a strange spot or mass like structure while imaging? Well the chapter on Masses will help you determined what this structure may be. The specimen images are especially useful in this chapter.

A special mention must be made about the genetic flow diagrams in the Systemic Disease chapter showing how these familial diseases are inherited. It can also help the Sonographer become more aware of which family members may need screening for these Systemic diseases. The tips throughout the text are always useful when quickly flicking through chapters between patients to try and find that certain item or helpful hint you are after.

All the essentials are there and for those who want to read more, there are ample further readings.

Overall Bonita has put together a fantastic text that Sonographer's have been looking forward to - This text is a must have in any Echocardiography Lab.