

General Ultrasound in the Critically ill

Authors Daniel Lichtenstein, M.R. Pinsky and F. Jardin
 Publisher Springer
 Year 2004
 ISBN 3540208224
 Price \$A210.00

This 189-page hard cover text makes for interesting and, at times, thought-provoking reading. Daniel Lichtenstein MD, from France, is described in the two forewords to the book, as 'an intensivist and physician-sonographer' and 'one of the leaders in the field'.

Lichtenstein describes the book as having the dual purposes of describing 'the fullest exploitation possible of general ultrasound in the intensive care unit' and helping to 'popularise a method that remains obscure to those who have never used it'. The text is therefore aimed at radiologists who may be involved in the emergency medicine setting, intensivists and emergency medicine physicians. In countries such as Australia and New Zealand, the book is also applicable to sonographers working in acute care hospitals. Both the clinical applications of ultrasound techniques in the critically ill and the rationale/philosophy of ultrasound performed by critical care physicians are well discussed and appear to be supported by the author's extensive experience and own research.

Three separate sections are included. *Part I Generalities* consists of four brief chapters; *Basic Notions*, which is a very limited description of the basics of ultrasound imaging; *The Ultrasound Equipment*, which is a brief, somewhat quirky in places, description of basic equipment; *Specific Notions of Ultrasound in the Critically Ill*, is an interesting five pages on the advantages and disadvantages of scanning the critically ill patient and provides some insights into specific features of this area of imaging, such as indications for the ultrasound examination; and last a very brief, scantily illustrated chapter *General Ultrasound: Normal Patterns*. In this last chapter of the section, Lichtenstein indicates that the term 'general ultrasound' is usually understood to mean 'abdominal ultrasound' and indeed this chapter is an overview of the basic, normal ultrasound appearance of the main

organs of the abdomen. The rest of the book, however, uses the term 'general ultrasound' to have a much broader scope than this and includes an almost 'whole of body' approach.

At 18 chapters and 127 pages the *Part II: Organ by Organ Analysis* section forms the major part of the text and includes some very interesting information on the applications, advantages, disadvantages and limitations of ultrasound in a diverse range of situations. The chapters cover all areas of the abdomen, including the peritoneum and retroperitoneal space; the venous system including upper extremity central veins, IVC, lower limb veins; the mediastinum; general ultrasound of the heart; head and neck; and soft tissues in various areas of the body. Four chapters are devoted to ultrasound techniques in the lung: pleural effusion, pneumothorax, diseases of the lung tissue and disorders of the diaphragm. The chapter *Lung Ultrasound Applications* presents some of the clinical potentials of applying what the author calls 'the seven principles of lung ultrasound'.

Part III: Clinical Applications of Ultrasound discusses the application of ultrasound in specific settings or situations. Included are chapters such as: *Ultrasound in the Surgical Intensive Care Unit (ICU)*; *Ultrasound in Trauma*; *Emergency Ultrasound Outside the ICU*; *Interventional Ultrasound*; *Emergency Ultrasound and Antibiotic Therapy*; *Learning and Logistics of Emergency Ultrasound*; and *Ultrasound, a Tool for Clinical Examination*. This section makes for interesting reading and offers a different perspective on the use of ultrasound in many situations to that found in standard ultrasound texts written for sonologists and sonographers. The final chapter *Concluding Remarks* offers a discussion of the role, value and applicability of ultrasound in the critically ill patient.

Overall, this is a very interesting text, however, a major criticism is the quality of some of the images which have all been obtained using quite old equipment. Lichtenstein justifies this by indicating that he would prefer to 'keep characteristic figures, as a clinically contributive image is definitely better, in the emergency, than the sophisticated image dear to the imaging specialist'. Indeed there may well be other aspects of the text and its

philosophy that the imaging specialist may object to, but I thought there were many interesting aspects and much to be learned from this book.

I would recommend the book to anyone working in an acute care setting with a busy emergency department and all those involved in teaching general sonologists and sonographers, and emergency medicine physicians.

Margo Gill

Textbook of Diagnostic Ultrasonography 6th Edition, Vols 1 & 2

Editor/Author Sandra L Hagen-Ansert
 Publisher Mosby Elsevier
 ISBN 13 9780323028035, ISBN 10 3323028039
 Approximate cost \$A425.00 inc GST

This text was first published in 1978 and has since been widely used by those training in ultrasonography. The sixth edition is an extensive text and includes new chapters on physics, contrast agents in abdominal applications, ultrasound-guided interventional techniques, emergency abdominal scanning, musculoskeletal system, neonatal hip/spine, female infertility and 3D/4D evaluation of fetal anomalies.

Sandra Hagen-Ansert and 18 contributors have covered all aspects of sonography in a thoroughly comprehensive manner, explaining that 'the primary goal of the text is to serve as an in-depth resource for students studying sonography as well as a reference for experienced practitioners'. The chapters cover sonographer technique including practical instructions on patient history taking, patient positioning, protocols and probe manipulation and orientation.

Each chapter is laid out with learning objectives, chapter outlines, key terms and definitions. This makes it very easy for the reader to find the information they are looking for. The sonographic examination details follow on from the sections on anatomy, physiology, laboratory data, pathology and numerous tables and charts with a distinctive sonographic findings icon. Over 3000 illustrations are included and there are many new full color illustrations, high quality ultrasound images and gross pathology photos.

The chapter on musculo-



skeletal (MSK) ultrasound is limited, reflecting the use of ultrasound for MSK in the USA. Shoulder, wrist and Achilles regions have been covered with general MSK technique and artefacts outlined. Although not covering other regions, it has practical instructions for examining the musculoskeletal system and provides the trainee with a good start in MSK.

This is an excellent text for trainee sonographers and a very good practical addition to any department. The chapters are clearly laid out and a workbook to accompany the text is also available.

Glenda McLean
Tutor Sonographer
Monash Medical Centre

Handbook of Early Pregnancy Care

Editors Thomas H. Bourne and George Condous
 Publisher Taylor & Francis
 ISBN 1842143239
 Approx cost \$A120

While this book is succinct and informative, editor Condous' chapter on what to do when you cannot see a pregnancy, which you suspect is there, is worth the book's price alone.

The concept of pregnancies of unknown location (PUL) is one we

should accept and bear in mind before we assume an empty uterus is due to a complete miscarriage.

The point is made that complete miscarriage is not diagnosable by ultrasound. A serum hCG must be done to exclude an ectopic pregnancy. The rare case of the patient with an earlier scan in the pregnancy, confirming an intra-uterine gestation, who a week later has an empty uterus, might be the exception to that rule.

Ectopic pregnancy is important enough to claim six out of the 16 chapters. There is an excellent chapter by Kirk on expectant management of ectopic pregnancy, with emphasis on the strict criteria to be fulfilled before embarking on that route. Surgical management is also well reviewed by Istre.

Bottomley's chapter on caesarean scar pregnancy reminds us that with increased caesarean section incidence, we will see more of these and if suspected, referral to a specialist centre may save a life.

I strongly recommend that every ultrasound clinic where pregnant women are seen should have a copy of this book and it should also be required reading for radiologists and obstetricians in training.

Ron Benzie
Professor
Nepean Hospital

ASUM Giulia Franco Teaching Fellowship
 Proudly sponsored by
Toshiba Medical

Since the introduction of ultrasound, Toshiba has been at the technological forefront of this diagnostic imaging technology. Throughout the years, Toshiba's innovations have set new standards and created new applications that have significantly extended ultrasound capabilities.

The Giulia Franco Teaching Fellowship was established by ASUM in association with Toshiba Medical to provide educational opportunities for sonographers in all parts of Australia and New Zealand. It is named to commemorate Giulia Franco whose passion for ultrasound took her to all parts of Australia and New Zealand, and continued as she moved into a business career with Toshiba. It was first awarded in 2004.

The Giulia Franco Teaching Fellowship will focus on major city centres.

Moving? New job?
Don't forget to tell ASUM:
 email asum@asum.com.au

SONOGRAPHER REGISTRATION WORKING PARTY

**Sonographer registration will happen –
 Help us to make it happen on our terms**

What the current accreditation system means

Since 2001, the Australasian Sonographer Accreditation Registry (ASAR) has been the body for accreditation of sonographers in Australia. This involves:

- Assessing and evaluating education and training courses and institutions to uphold standards and consistency of sonographer education and training; and
- Ensuring sonographers meet the required level of expertise and maintain that level via mandatory continuing professional development (CPD).

The Sonographer Registration Working Party, comprising representatives of all professional associations and stakeholders – ASAR, ASUM, ASA, AIR, and CSANZ – has been formed to work towards developing a national sonographer registration board.

What future national Sonographer Registration would mean for you and the ultrasound profession

- Offers protection to patients and the community by assuring the quality and safety of ultrasound service provision by registered sonographers;
- Enhanced accountability of practitioners in ultrasound;
- Avoids the multiplicity of state based registration boards and their associated fees, thus facilitating interstate work opportunities;
- Uniform national standards – assessment of character and fitness to practice;
- Recognition of sonography as an allied health profession; and
- Protection of the title 'sonographer'.

**All enquiries may be addressed to the ASUM representative, Ros Savage,
 via email srwp@asum.com.au**