Ultrasound in Anesthetic Practice

Edited by

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# Contents

- **List of contributors** page vii
- **Preface** ix

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Principles of medical ultrasound</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Graham Arthurs, Patrick Hill and Trevor Frankel</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ultrasound to aid vascular access</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Philip Haslam</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Diagnostic echocardiography</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Tom Ingram</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The role of echocardiography in the hemodynamically unstable patient</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>in critical care and the operating theater</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Julian Skoyles and Henry Skinner</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Transesophageal diagnostic Doppler monitoring</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Robert Kong</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Use of ultrasound in the intensive care unit</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>John Oram and Andrew Bodenham</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Use of ultrasound in the traumatized patient and the acute abdomen</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Sapna Puppala, Vishwanath Acharya, David A. Parker and Dennis Li.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cochlin</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Use of ultrasound to aid local anesthetic nerve blocks in adults</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Barry Nicholls, Stephan Kapral, Peter Marhofer and Alice Roberts</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Use of ultrasound to aid local anesthetic nerve blocks in children</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>Amy Walker and Steve Roberts</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Cranial ultrasound in the newborn</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>Owen Arthurs</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The use of ultrasound in acute gynecology and pregnancy assessment</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>William Taylor</td>
<td></td>
</tr>
</tbody>
</table>
CONTENTS

12 Ultrasound in ophthalmic anesthesia 169
   CHANDRA M. KUMAR

13 Use of ultrasound in assessing soft tissue injury 178
   GEOFF HIDE

Index 196
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Preface

The aim of this book is to provide a practical introduction to medical ultrasound. A few years ago we searched in vain for a book that would give the clinician an introduction to the use of ultrasound in clinical practice. There were many specialist books but no easy to read book that told a trainee or clinician about all the possible uses of ultrasound, what they could learn to do for themselves, and when they should ask others to help. As we explored the subject, we realized that ultrasound is both complicated to understand properly and yet simple to use in practice. In all, we have identified 12 aspects of medical practice in which ultrasound has a part to play. We approached clinicians who are experts in their fields to write a well-illustrated guide to the use of ultrasound.

Clinical ultrasound involves identifying normal and abnormal patterns. We felt that the best way of helping the reader to identify these patterns was to present as many ultrasound scans as possible. This has been made possible by the use of a series of PowerPoint presentations on the accompanying DVD.

The combination of a text book with a DVD combines the best of both educational tools. We hope that the reader will study the text but at the same time view the illustrations on their laptop. In this way the images are reproduced nearer to their original quality. The images will also be larger than possible in any printed text. The video clips show movement, such as the action of the heart, in a way that cannot be achieved in an ordinary text book.

While the first ultrasound was used clinically about 50 years ago, it is the rapid development of micro-computer technology in the past 10 years that has brought ultrasound into everyday clinical practice. It is likely that within the next 10 years, portable ultrasound devices will be carried by all clinicians as they carry a stethoscope or laptop today. We hope that this book will be of help to many students, trainees and practitioners who need to know what this technology can and cannot do. There are also mature clinicians, like ourselves, who have not been brought up with ultrasound, and we hope they will find this a useful way to update their knowledge.

The objective that was set each author was to produce an introduction to their specialist area; to explain what ultrasound can and cannot do; to give practical guidance on how to obtain the best results; to encourage the greater but safer use of ultrasound; and to indicate when to seek further help.
PREFACE

In any multi-authored book, it is inevitable that there will be some overlap between the presentations. These have not been edited out, as each author wrote their chapter as a stand-alone text. Reading more than one explanation of the same subject can also aid understanding.

We are very grateful to all the authors for their efforts, to Tony Bailey and Dr. Alice Roberts for drawing the illustrations, and to the staff at Cambridge University Press for bringing the whole to a successful conclusion.

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