Core Topics in Thoracic Anesthesia
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Edited by

CAIT P. SEARL
SAMEENA T. AHMED
For Ben
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Contributors

Sameena T. Ahmed
Freeman Hospital
Newcastle upon Tyne
UK

Douglas Aitchison
Essex Cardiothoracic Centre
Basildon and Thurrock University Hospital
Nethermayne
Basildon
UK

Abdalla Banni
Freeman Hospital
Newcastle upon Tyne
UK

Sion Barnard
Freeman Hospital
Newcastle upon Tyne
UK

Stephen Clark
Freeman Hospital
Newcastle upon Tyne
UK

Ian Conacher
Freeman Hospital
Newcastle upon Tyne
UK

Taj Dhallu
University Hospital of Wales
Cardiff
UK

Vijay Jeganath
University Hospital of North Staffordshire
Stoke-on-Trent
UK

John Jerstice
University Hospital of North Staffordshire
Stoke-on-Trent
UK

David Morrice
New Cross Hospital
Wolverhampton
UK

Tim Murphy
Freeman Hospital
Newcastle upon Tyne
UK

Jayanta Nandi
Surgical (Cardiothoracic) SPR
West Midlands Deanery
Department of Cardiothoracic Surgery
New Cross Hospital
Wolverhampton
UK

Alexander Ng
Heart & Lung Centre, New Cross Hospital
Wolverhampton
UK

Leena Pardeshi
Freeman Hospital
Newcastle upon Tyne
UK
David Place
University Hospital of Wales
Cardiff
UK

Mahesh Prabhu
Freeman Hospital
Newcastle upon Tyne
UK

O. P. Sanjay
Freeman Hospital
Newcastle upon Tyne
UK

Cait P. Searl
Freeman Hospital
Newcastle upon Tyne
UK

David C. Smith
Southampton General Hospital
Southampton
UK

Jonathan Hayden Smith
Freeman Hospital
Newcastle upon Tyne
UK

Christine Tan
University Hospital of Wales
Cardiff
UK

Kamen Valchanov
Papworth Hospital
Cambridge
UK

Alain Vuylsteke
Papworth Hospital
Cambridge
UK

Christopher Wigfield
Freeman Hospital
Newcastle upon Tyne
UK
Preface

This book is aimed primarily at trainees gaining experience in thoracic anesthesia. The content has been dictated both by what we would wish our trainees to gain from our own experience and practice and what we might expect them to know already! Acknowledgments and thanks are therefore due to the many patients who come under our care, who, together with our colleagues, have provided the basis for our experience and practice. We would also like to thank Cambridge University Press for their patience and support during the evolution of this text.
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ALI</td>
<td>acute lung injury</td>
</tr>
<tr>
<td>ARDS</td>
<td>adult respiratory distress syndrome</td>
</tr>
<tr>
<td>BPF</td>
<td>bronchopleural fistula</td>
</tr>
<tr>
<td>BSLT</td>
<td>bilateral lung transplant</td>
</tr>
<tr>
<td>BTS</td>
<td>British Thoracic Society</td>
</tr>
<tr>
<td>CMV</td>
<td>cytomegalovirus</td>
</tr>
<tr>
<td>CNS</td>
<td>central nervous system</td>
</tr>
<tr>
<td>CO</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>CO$_2$</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>COPD</td>
<td>chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>cPAP</td>
<td>continuous positive airways pressure</td>
</tr>
<tr>
<td>CPB</td>
<td>cardiopulmonary bypass</td>
</tr>
<tr>
<td>CT</td>
<td>computerized tomography</td>
</tr>
<tr>
<td>CTEPH</td>
<td>chronic thromboembolic pulmonary hypertension</td>
</tr>
<tr>
<td>CVP</td>
<td>central venous pressure</td>
</tr>
<tr>
<td>CXR</td>
<td>chest X-ray</td>
</tr>
<tr>
<td>DLT</td>
<td>double lumen endobronchial tube</td>
</tr>
<tr>
<td>ECG</td>
<td>electrocardiogram</td>
</tr>
<tr>
<td>ECMO</td>
<td>extracorporeal membrane oxygenation</td>
</tr>
<tr>
<td>ERV</td>
<td>expiratory reserve volume</td>
</tr>
<tr>
<td>FEV$_1$</td>
<td>forced expiratory volume for 1 second</td>
</tr>
<tr>
<td>FOB</td>
<td>fiberoptic bronchoscope</td>
</tr>
<tr>
<td>FRC</td>
<td>functional residual capacity</td>
</tr>
<tr>
<td>FVC</td>
<td>forced vital capacity</td>
</tr>
<tr>
<td>GERD</td>
<td>gastro-esophageal reflux disease</td>
</tr>
<tr>
<td>HPV</td>
<td>hypoxic pulmonary vasoconstriction</td>
</tr>
<tr>
<td>I:E</td>
<td>inspired:expiratory time</td>
</tr>
<tr>
<td>IPPV</td>
<td>intermittent positive pressure ventilation</td>
</tr>
<tr>
<td>ISHLT</td>
<td>International Society of Heart and Lung Transplantation</td>
</tr>
<tr>
<td>IRV</td>
<td>inspiratory reserve volume</td>
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<td>LVRS</td>
<td>lung volume reduction surgery</td>
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<td>LTx</td>
<td>lung transplant</td>
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<td>MPAP</td>
<td>mean pulmonary arterial pressure</td>
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<td>minute ventilatory volume</td>
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<td>NIV</td>
<td>non-invasive ventilation</td>
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<tr>
<td>NO</td>
<td>nitric oxide</td>
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<tr>
<td>O$_2$</td>
<td>oxygen</td>
</tr>
<tr>
<td>OLV</td>
<td>one-lung ventilation</td>
</tr>
<tr>
<td>P$_a$</td>
<td>partial pressure (arterial)</td>
</tr>
<tr>
<td>P$_A$</td>
<td>partial pressure (alveolar)</td>
</tr>
<tr>
<td>P$_v$</td>
<td>partial pressure (venous)</td>
</tr>
<tr>
<td>PA</td>
<td>pulmonary artery</td>
</tr>
<tr>
<td>PEA</td>
<td>pulmonary endarterectomy</td>
</tr>
<tr>
<td>PEEP</td>
<td>positive end-expiratory pressure</td>
</tr>
<tr>
<td>PEF</td>
<td>peak expiratory flow</td>
</tr>
<tr>
<td>POD</td>
<td>post-operative delirium</td>
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<tr>
<td>Q</td>
<td>perfusion</td>
</tr>
<tr>
<td>RB</td>
<td>rigid bronchoscope</td>
</tr>
<tr>
<td>RV</td>
<td>residual volume</td>
</tr>
<tr>
<td>TCB</td>
<td>torque control blocker</td>
</tr>
<tr>
<td>TLC</td>
<td>total lung capacity</td>
</tr>
<tr>
<td>TIVA</td>
<td>total intravenous anesthesia</td>
</tr>
<tr>
<td>TOE</td>
<td>transesophageal echocardiography</td>
</tr>
<tr>
<td>TV</td>
<td>tidal volume</td>
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<tr>
<td>V</td>
<td>ventilation</td>
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<td>VATS</td>
<td>video-assisted thoracoscopic surgery</td>
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<tr>
<td>VC</td>
<td>vital capacity</td>
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