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• Guidelines for Post Anaesthetic Care Unit
Mechanical Ventilation
MADE EASY®

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Forewords
E Radhakrishnan
J Renganathan
To

Prof (Dr) AA Asirvatham

- My Godfather who loved me and guided me in my personal as well as professional life
- A wonderful human being with a very kind and loving heart towards his patients and his fellow men
- A loving teacher with great virtues and skills, held in high esteem in the field of surgery, responsible for transforming thousands of medical men into good surgeons

Prof (Dr) AA Asirvatham

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FOREWORD

There has been a need for a simple textbook on Mechanical Ventilation which can be read and understood easily not only by clinicians but also by paramedical staff working in Intensive Care Units.

As clearly averred by the author Prof S Ahanatha Pillai, the available books were of a high standard which can be understood by the Intensivists, the Anesthesiologists, or the Pulmonologists. All these specialists may not be available at the spot of acute crisis. The patient’s condition would deteriorate further by the time these specialists arrive. This book would help the clinicians on the spot as well as the paramedics in tackling the emergency situation.

No ventilatory therapy is complete unless one knows how to wean the patient from the ventilator. This has been meticulously dealt with by the author. Further, the book is written in a simple language and at the same time avoiding sophisticated technical terminologies.

True to commitment in imparting knowledge to students and clinicians, Prof S Ahanatha Pillai has taken great pains to write this important topic in a simple way.

I strongly recommend this book to be kept in the libraries of all the medical institutions in general, as well as in the libraries of Intensive Care Units and Anaesthesiology Departments.

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It is a great pleasure to go through the book *Mechanical Ventilation Made Easy* by Dr S Ahanatha Pillai written especially for the clinicians and the people working in Intensive Care Units.

It makes an enjoyable reading of a relatively difficult subject. The text is presented very clearly starting from the applied anatomy and physiology, gradually building up to mechanics of breathing and then to the clinical applications of mechanical ventilation. All the essential aspects are discussed in a very simple way that makes it easy to understand.

Though the author has mentioned that he has avoided intricate technical details, I find that it contains almost all essential details.

I hope this book will be useful to all those who work in Intensive Care Units and who wish to gain in-depth knowledge about mechanical ventilation.

I am sure this small book on Mechanical Ventilation will certainly serve the purpose for which it is written.

Prof (Dr) J Renganathan MD DA
Former Professor and Head
Department of Anaesthesiology and Intensive Respiratory Care Unit
Government Stanley Medical College, Chennai
National Secretary
Secretary, Indian Medical Association Tamil Nadu (2000–2003), India
Numerous books are available in the market on Mechanical Ventilation and Ventilator Therapy. These books are too good for any specialist to read, but are of high standard for the students. Many internees and nurses just look at a ventilator, as if it is a monster and show the least interest to know anything about it. On the other hand, there are many young doctors and nurses having a lot of curiosity to learn about ventilators. They search for a simple book that tells them clearly all about the mechanical ventilation. This book is meant to fulfill their requirements.

Nowadays, non-availability of ventilators is no longer a problem. The most sophisticated ventilators are available everywhere and are in wide use across the world. The patients on ventilator therapy are managed by specially trained and efficient nurses who are well versed in ICU nursing, under the guidance of Intensive Therapy Physicians.

Nevertheless, many a time, the initial management of a patient which includes intubating the patient; connecting him to the ventilator and making the initial ventilator settings are all done by the intern, the house surgeon or the nurse in the Intensive Therapy Unit. Therefore, it is essential that these young doctors and nurses have a clear orientation of mechanical ventilators for a better management of their patients.

However, unfortunately, some of the doctors and nurses lack the information about the fundamental principles involved in ventilatory support. They have very little idea as to how different modes and settings are meant to support the ventilation. The application of suitable modes and settings for a particular patient in a particular clinical situation requires a better knowledge of these fundamentals. It is needless to say that if there are any errors at this primary level, the whole purpose of the therapy may fail.
This small book is designed in such a way that it is directed towards filling this lacuna of information.

It gives details of two aspects:
• The basic mechanisms of normal respiration and how they are modified in artificial ventilation
• How the different modes and settings of ventilator work with their indications, merits and demerits

Purposely, I have tried to present the material in a simplest style possible and in a very simple language. I have provided the essence of the subject without going deep into the intricate details so as to make it easy to understand. Too much of technical details are deliberately avoided, as it may confuse the students and stop them from reading further. Only to make the reading interesting, I have given the history as the second chapter.

I hope this book will be of definite use to medical internees, ICU nurses and medical practitioners.

This book is not meant to take the place of any textbook on ventilator therapy, but to help as a ready reckoner. The scope of this small book is not anything beyond that.

S Ahanatha Pillai
I am extremely grateful to all my teachers, who always made me realise and feel that teaching is a wonderful experience and inspired me to learn that art.

My loving students, both undergraduates and post-graduates consistently inspired me to continue teaching for more than three and a half decades. I am grateful to them for their love to me.

With lot of gratitude, I make special mention about the contribution from my loving wife Mrs Neelam Ahanathan for being a constant source of inspiration and encouragement in all my endeavors, particularly those related to academic ventures and my children for their loving care and the support they give me.

My younger colleagues Prof (Dr) A Paramasivan, MD, DA, Professor and Head of the Department of Anaesthesiology, Government Thoothukudi Medical College, Thoothukudi and Dr G Saravana Kumar, MBBS, DA, helped me in every step of this work. My sincere thanks and love are due to them.

I am immensely grateful to Prof (Dr) E Radhakrishnan, MD, DA, Emeritus Professor, The Tamil Nadu Dr MGR Medical University, Former Professor and Head, Department of Anaesthesiology, Madurai Medical College and Government Rajaji Hospital, Madurai for going through the book and giving a foreword.

My good friend Prof (Dr) J Renganathan, MD, DA, Former Professor and Head, Department of Anaesthesiology and Intensive Respiratory Care Unit, Government Stanley Medical College, Chennai has been kind enough to go through the book and give a foreword. I thank him profusely for that.

I am always very grateful to all my patients for all that they taught me during the past three and a half decades, particularly to those patients treated in the Intensive Respiratory Care Unit, Government Rajaji Hospital, Madurai, as they gave me the
opportunity to learn the clinical applications of ventilator therapy.

My very sincere gratitude is due to Mr R Jayanandan (Senior Author Coordinator) of M/s Jaypee Brothers Medical Publishers (P) Ltd, Chennai, for the excellent and encouraging coordinating work he did with regard to this book as he did with my earlier publications.

I sincerely thank Shri Jitendar P Vij (Chairman and Managing Director) and Mr Tarun Duneja (Director–Publishing) of M/s Jaypee Brothers Medical Publishers (P) Ltd, New Delhi particularly for the inimitable support they rendered in bringing out this book in a very presentable form in a short time.
MECHANICAL VENTILATION MADE EASY

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