

Tracheostomy: A Multiprofessional Handbook. Claudia Russell and Basil Matta, editors. London: Greenwich Medical Media Ltd. 2004. Soft cover, illustrated, 392 pages, \$32.99.

As someone who believes strongly that critical care medicine is best practiced in a multidisciplinary setting, I was intrigued by the title, **Tracheostomy: A Multiprofessional Handbook**. The practice of tracheostomy has been around a long time and yet continues to engender substantial controversy, particularly with regard to indications and timing of the procedure. This is of particular note when considering the increasing practice of percutaneous tracheostomy in the intensive care unit (ICU).

The overall practice and care of tracheostomy demands involvement from a variety of associated disciplines, which forms the basis of the initial appeal of the book's title. I was also interested to review a British title, having trained in the United Kingdom.

My initial enthusiasm was tempered, however, by substantial variation in quality of the 22 chapters that compose the book. The authorship is predominantly based around Cambridge in the United Kingdom, a well-known academic center, and includes anesthesiologists, otolaryngologists, physiotherapists (a British equivalent of respiratory therapist), speech and language therapists, tracheostomy support nurses, oncologists, nurse practitioners, nutritionists, and even a parent and caregiver of a tracheostomized child! This is both a source of strength and a weakness of the book, where diverse opinions and experiences are brought into play, offering valuable new perspectives to many, but at the expense of clarity, conciseness, and readability.

Logically enough, the first chapter presents the anatomy and physiology of the respiratory tract. This is perhaps the most disappointing chapter and makes for an initially bad impression. It is poorly structured and badly integrated, with a mixture of oversimplified anatomy and needlessly complex physiology. There was no overall conceptual illustration of how the system works. This would have been useful for readers drawn by the multi-disciplinary title but who

are less familiar with the airways than physicians or respiratory therapists. There were, instead, a loosely conglomerated collection of facts and concepts in the style of key points, including the neuronal composition of the respiratory center in the brain, lower motor neuron reflexes in the spinal cord, as well as the function of Clara and amine-precursor-uptake decarboxylase (APUD) cells in the alveolus. I seriously question the relevance of these latter elements in a text of this type. They seem to have been included for the sake of appearance rather than any contribution to the message.

Even more disappointing were a number of errors and misconceptions (eg, a statement that pulmonary stretch reflexes have a minimal role in man). The author also mistakenly uses density rather than viscosity in the Hagen-Poiseuille equation (which describes airflow in the bronchi). The terms in the equation are unexplained and it again seems to have been included purely for show. If the author really felt the need to include this latter element in a text meant for a varied readership, she could at least have gotten it right!

The description of alveolar gas exchange is better, but the depiction of chest wall mechanics is poor. The key omission is the absence of any discussion of the effect of tracheostomy upon pulmonary function. Fortunately, this is covered to some degree in later chapters, but, overall, the reader would be much better served to look at other books for a clearer concept of the anatomy and function of the respiratory system.

The next 2 chapters define and describe tracheostomy, including the history of the procedure as well as the indications for and conduct of the surgical procedure. I found it curious that my main field of practice (patients with neurological compromise, either by brain or spinal cord injury) were omitted. There is a useful discussion of alternatives to tracheostomy and, thankfully, there are some details on the physiologic effects of the procedure.

Both chapters are by the same author, which perhaps explains the degree of repetitiveness in both writing and diagrams. Nonetheless, nonsurgical readers will benefit from the clear description of the operative technique, and all readers should take

note of a reasonable description of the immediate and late complications (apart from the implausible inclusion of hypocarbia-induced apnea!). One of my major complaints about the whole book is the quality of the photographs, which are gray, grainy, and far from clear. This is especially true of the photographs in this section.

The next chapter, written by intensivists, details the history, indications, prerequisites, and performance of percutaneous tracheostomy. Exclusion factors are discussed, but in over 10 years of performing these procedures, I consider requirement for a high positive end-expiratory pressure and a fraction of inspired oxygen ($F_{I_{O_2}}$) above 0.6 as important contraindications, and consideration of these factors was disappointingly absent.

I was also disappointed by the limited discussion and comparison of the percutaneous to the surgical technique, which would have been of key interest to the ICU practitioner.

A good discussion of those factors identifying a difficult airway follows in Chapter 5, although some mention of the sensitivity and specificity of assessment tools (eg, the Mallampati scale) would have been useful.

The chapter on tracheostomy tubes is organized sensibly, although oriented toward European manufacturers. However, I was puzzled by the insistence that cuffed tubes are not useful in the pediatric population because of the narrow cricoid aperture—which is *above* the tracheostomy. Better editing might have picked up that this is relevant to orotracheal intubation rather than tracheostomy. Similarly, the photograph of a pediatric cuffed tracheostomy tube is described as an uncuffed tube in the legend below.

Tracheostomy management in the ICU is the subject of the next chapter. This tends again toward repetitiveness, and I found myself wondering if the editors of the book had tried to edit together as a whole, or merely compiled it. It is not a large enough text to encourage the isolated reading of chapters, which is perhaps the only justification for the repetition of indications, complications, and tube selection. However, the description of physiologic consequences of

tracheostomy in this chapter makes much better reading than Chapter 1.

The chapters on humidification and suctioning are written clearly and offer insight into often overlooked facets of respiratory care. They are diminished only by the inclusion of poor-quality photographs.

Wound care is again sensibly dealt with, and the discussion of materials is informative, although the detail is slightly over the top. I suspect that many practitioners do not need to be educated in how to change a Velcro tube holder.

Swallowing is a key element of normal physiology that is substantially affected by tracheostomy, and there is an excellent mechanistic analysis of this. Again, the photographs are terrible, and a good diagram would have been much more effective. The diagram illustrating that normal airflow goes down the trachea appears to be somewhat redundant to a reader with any medical background whatsoever.

This does not prevent its inclusion again in the next chapter, on communication, which, apart from the degree of repetition, enjoys a reasonably well structured and logical approach that I found useful.

Changing the tracheostomy can be a source of stress and anxiety to patients, caregivers, and practitioners, and the subject is well dealt with in the next chapter, with particular regard to the preparations required. It includes an algorithmic approach to tube displacement that is reasonably clear and structured.

More electively oriented decannulation is the subject of Chapter 14. There is, again, substantial repetition, this time on the subject of the dye test outlined in the swallowing chapter, but apart from this the approach is sensible. I found the inclusion of some of the author's own charting material somewhat superfluous. I suspect most readers do not need to see an empty chart that records how long the tracheostomy was capped.

The over-presentation of material is continued in the chapter on tracheostomy and head and neck cancer, which goes into far too much detail on the principles and complications of radiotherapy, with no particular relevance to tracheostomy. The description of the effects of radiation on the tracheostomy site are almost an afterthought at the end of the chapter, but perhaps compose the key elements of interest in radiotherapy to most practitioners involved in airway care.

The concepts of long-term tracheostomy and supportive care are dealt with next. Most of the points are sensibly made, but, again, with repetition and an excess of the chapter author's own sample charting materials. A reference to an Internet site for optional downloading may have been more useful and considerably more concise. A list of educational aids and manufacturers is oriented toward British suppliers.

Substantial mention is made in preceding chapters of some of the particular requirements and features of pediatric patients. However, there follows a dedicated chapter on pediatric tracheostomy, accompanied by successive chapters on nursing care of the child with a tracheostomy, children's tracheostomy care in the community, and "Evie's Story," an account of a parents' experience of their child's tracheostomy. While superficially interesting in a "magazine article sort of way," this latter was of questionable relevance, especially given the content of the preceding chapters. The entire section could and should have been amalgamated and massively edited, to remove what was rapidly becoming (for me) tiresome repetition. This would considerably improve readability. I am at a loss to understand the requirement to have all these separate chapters focusing on the aspects of pediatric tracheostomy care, which, as the authors state, is unusual and largely confined to specialist centers and services.

A section on infection control is necessary in any consideration of procedures undergone by ICU patients. Some of the facts and figures are irrelevant to a non-British audience, but serve to communicate the considerable cost implications of infection—a message that can never be understated. The discussion of pathogens and treatment strategies is appropriate, particularly as they confirm my own prejudices about inadequate staff hand-washing!

The book's photographs let it down again, unfortunately. I really do not see the point in including a poor-quality photograph of agar plates containing pseudomonal and streptococcal growths in a book aimed at multiple specialties. It seems to be an illustration purely to fill a space rather than to inform.

The final chapter looks at nutrition of the tracheostomy patient and is a sensible discussion of the dietary requirements of such patients, with relevance to their predisposing illness that may have induced the requirement for tracheostomy, the debilitat-

ing effects on glutition, and the common malnutrition affecting the ICU patient.

My overall impression is of a substantially uneven book. The elements that appealed to me most were those commonly overlooked in those texts oriented toward physicians (ie, swallowing, humidification, suction care, and tracheostomy materials), and I would recommend these to any practitioner. It is a worthwhile description of the surgical and percutaneous techniques, but Chapter 1 does it an immense disservice. The overall editing of the book leaves a lot to be desired in terms of content and errors, and the repetition and poor-quality illustration impair its reading. This is accentuated by the poor standard of punctuation in many chapters; many sections have to be read twice in order to establish the sense of the text. A good editor might have picked up these faults.

It is not a substantially expensive book, and perhaps that may be its most attractive feature.

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Clinical Scenarios in Thoracic Surgery.

Robert Kalimi MD and L Penfield Faber MD. (Clinical Scenarios in Surgery series). Philadelphia: Lippincott Williams & Wilkins. 2004. Hard cover, illustrated, 322 pages, \$99.

In an intellectually impacted environment such as residency, where data are absorbed and expunged on a daily basis, it is a pleasure to read and learn from a text that attempts to translate textbook information into readable and memorable case-by-case prose. As one can imagine, this is not an easy feat to accomplish, considering the scope of thoracic surgical information a text would like to impart. My desire to employ this book as a method to impress my superiors was sparked by the anxiety of having to work and learn from an experienced thoracic surgeon. During the few remaining days of my general surgery residency, I scurried to find a text that would allow me to learn "the natural flow of thoracic surgical-decision making, progressing from the patient's clinical presentation, through diagnostic findings, to follow-up tests, the surgical ap-