

Current Concepts of Sleep Apnea Surgery

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It was not so long ago that the UK's 'withholders of healthcare' condemned surgery for obstructive sleep apnoea (OSA), at least for adults. Their argument was that it was of unproven efficacy, that continuous positive airway pressure (CPAP) would stent the airway, the mandibular advancement prosthesis was easier and simple lifestyle measures would make the whole subject irrelevant. However many initialisms or acronyms we create, patient compliance is the limiting factor and surgery may yet be indicated.

The book cover tells us that this is 'dedicated to the surgical management of sleep disordered breathing', and the preface states 'Today there are too many surgeries (sic) or modifications to include in one book. Therefore we have discussed those techniques that work in our hands', which seems eminently sensible, even if the sheer number and variety is telling us to be a bit pessimistic.

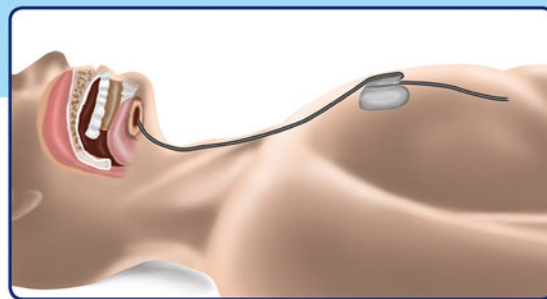
In practice, the first hundred pages cover the pathophysiology of OSA, the role of sleep studies and the topo-diagnosis of level of obstruction. The last is particularly good on the value and limitations of awake nasendoscopy, drug-induced sleep endoscopy and upper airway imaging. Perhaps reflecting the book's title and emphasis, the chapter on multimodality non-surgical treatment is very brief, at five and a half pages (this including illustrations), although a later chapter does carry three further pages on combination therapy to avoid surgery. The prognosis for all such measures seems, at best, guarded.

Paediatric OSA merits a chapter of 13 pages, whilst surgery in adults managed a ten-fold increase. This is probably appropriate as it is well established that, in non-syndromal children, adenotonsillectomy is generally safe and highly effective, on any outcome measures. The authors do warn of respiratory depression and central apnoea as a risk post-operatively, but I was surprised to find no mention anywhere of cor pulmonale and pulmonary, as opposed to systemic, hypertension. 'Pulmonary edema' appears solely as two words on a list of complications in 'Anaesthetic Implications'. Any surgeon who has seen the endotracheal tube repeatedly fill with pink foam, in the midst of surgery, would feel this worthy of greater emphasis and not purely an aesthetic management issue.

There is then a brief chapter on nasal surgery in adults, and the message is of course of ineffectiveness, other than in potentiating CPAP. By page 147, we are ready to read about radiofrequency, implants and stiffening procedures applied to the soft palate. Wisely, the authors reserve laser palatoplasty for simple

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snorers and not for OSA. The more invasive procedures of tonsillectomy and uvulopalatopharyngoplasty, or 'U3P' as we all know it now, have many modifications I now learn. The discussion of the literature on outcome measures, key points and 'Risks, Tips and Tricks' in boxed text were all excellent, and were highlights of the book. Coverage is comprehensive and goes on to tongue base procedures, whether suspensory or resective, all with the expected quality of colour illustrations. Nicely topical, there are detailed and particularly well illustrated descriptions of robotic surgery, hypoglossal nerve stimulation and even tracheostomy techniques. 'Maxillofacial Surgeries' (we might get used to that plural one day), multilevel operating and bariatric surgery close the operative coverage. A final chapter on post-operative care divides this into the 'Anaesthesiologist's Aspects' and 'Surgeon's Perspective', which basically just gives a nice summary of the book content.

This is a valuable book on a subject that remains controversial, especially as the evidence base, which is very well reviewed throughout, is either lacking or contradictory. Patient selection is clearly as important as procedure selection, and the multiplicity of operations does raise doubts that the issue is yet decided. It certainly lives up to its title as 'Current', and is recommended to all trainees and any working in this challenging field.