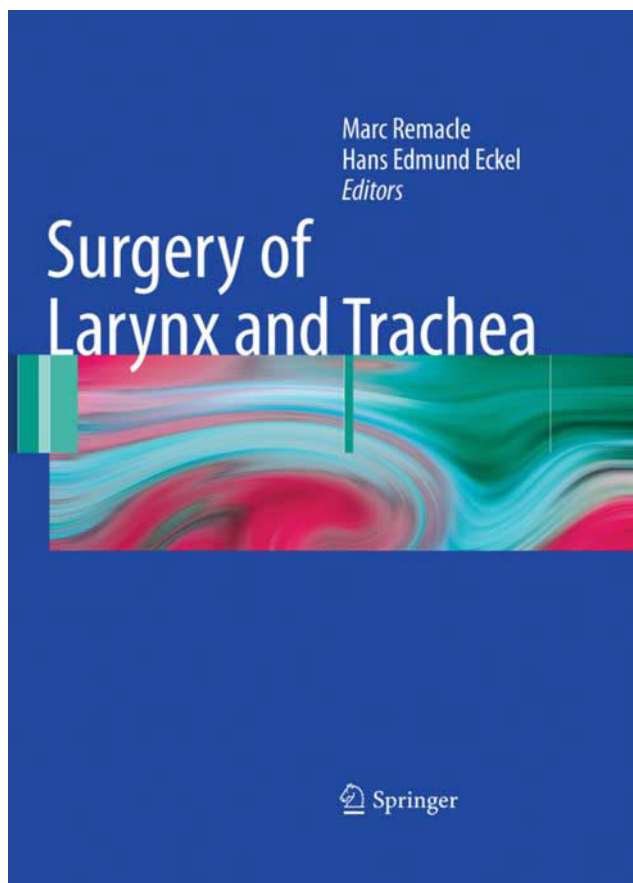


## Book review

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### Surgery of the larynx and trachea (part 2)

Marc Remacle, Hans Edmund Eckel (editors). 1st ed. Berlin, Heidelberg: Springer-Verlag, 2010. 308 pages. ISBN: 978-3-540-79135-5, suggested price: \$161.02



Chapter 11 on tracheostomy was prepared by Georges Lawson. It includes a good schematic presentation on the introduction of the tracheostomy tube, suitable for pedagogic purposes. Precious tips specific to tracheostomy in children are given.

The challenging topic of a scarred larynx and its surgical treatment was dealt with in Chapter 12a by Arens and Remacle. The authors classified the scarred larynx into four types according to its extent. Although they are experts in laser surgery, the authors did not hesitate to mention that ‘The CO<sub>2</sub> laser technique must be used with great caution to avoid thermal activation. This can be prevented by general avoidance of lasers in vocal fold surgery. Cold instruments are used to preserve as much mucosa as possible’. In laryngeal framework surgery, they introduced the idea of intraoperative transnasal fibroscopic control. They also commented on the transcervical approaches under local anesthesia.

Chapter 12b was dedicated to synechia of the anterior commissure. The author emphasized the role of 0, 25, 45 and 70 telescopes and of magnifying indirect laryngoscopy in the diagnosis of these lesions. He emphasized the roles of silicone sheet or keel and of mitomycin C in the treatment. The keel is positioned using the endo-extralaryngeal needle carrier of Lichtenberger.

Six consecutive chapters were dedicated to laryngeal and hypopharyngeal cancers.

At the foremost of them (chapter 13a), Hantzakos illustrated the common features of laryngeal and hypopharyngeal cancers. He highlighted the reemerging concept that surgical treatment remains superior to conservative treatment in the control of laryngeal and hypopharyngeal malignancies. The main argument is that the increase in nonsurgical management paralleled the increase in mortality from these tumors over the last decades. He stated that careful staging is the most important factor in treatment planning. He gave insight into novel diagnostic tools of laryngeal malignancies, such as contact endoscopy, autofluorescence laryngoscopy, fluorescence spectroscopy, optical coherence tomography, and narrow band imaging, as well as PET scan and its role in the follow-up of patients with laryngeal/hypopharyngeal malignancies. The discussion highlighted the relative evolution of conservative laryngeal surgery compared with conservative hypopharyngeal surgery. The author underlined the role of fractionation and/or acceleration of radiotherapy in the treatment of laryngeal/hypopharyngeal malignancies and concluded that altered fractionation radiotherapy is the treatment of choice for laryngeal cancer. He considered tumor chemosensitivity as being of utmost importance for choosing radiotherapy instead of surgery after induction chemotherapy. He stressed upon the idea that no larynx-preserving approach offers a survival advantage when compared with total laryngectomy and appropriate adjuvant therapy. He stated that concomitant chemoradiation may be used for larynx preservation in selected patients with stage III cancer when total laryngectomy is the only surgical option or when the functional outcome with surgery is expected to be unsatisfactory. For him, preclinical and clinical data support the hypothesis that EGFR inhibitors effectively radiosensitize cancer expressing high levels of EGFR.

The pioneers of transoral laser microsurgery, Eckel, Perretti, Remacle and Werner, prepared chapter 13b on the endoscopic approaches for laryngeal/hypopharyngeal malignancies. They stated that transoral approaches to head and neck carcinoma have been replaced with open surgical approaches that seemed more promising with regard to surgical radicality and oncological outcome. The restrictions of transoral approaches were: limited visualization, bleeding, difficult manipulation, and inability to reconstruct soft-tissue defects. Since the early 1980s, these authors – among many others – were able to show that transoral laser surgery has advantages in terms of its hemostatic effects and precision of tissue ablation. It was reported that laser surgery causes minimal morbidity, offers good functional results, and provides a cost-

effective alternative to open surgical procedures and to radiotherapy in small glottic and supraglottic carcinomas. Data indicated that transoral laser surgery leads to oncological results comparable to those attained with conventional treatment. The authors stated that the flexible fiberscope, rather than the rigid one, is the most useful tool for evaluating vocal cord and/or arytenoid mobility as well as pyriform sinus symmetrical expansion during phonation and swallowing. They underlined the role of the mucosal wave during video-laryngo-stroboscopic examination (VLS) in overcoming the subjectivity of evaluation of vocal cord mobility. They stressed that, in cases of glottic cancer, limited to the true vocal cord, an incomplete or absent mucoligamentous hydrodissection after subepithelial saline infusion during direct laryngoscopic examination has the same implications as a reduced or absent mucosal wave on the VLS and is associated with transgression of the basal membrane by neoplastic cells through the vocal ligament. They pointed out that integration of endoscopic findings with those from radiological imaging is an essential prerequisite for correct staging and treatment of any neoplastic lesion of the larynx and hypopharynx. Relying on the endoscopic information alone can lead to clinical underdiagnosis in 40–55% of cases. The authors raised two controversial issues: first, that no definitive argument exists against piecemeal laser resection of malignant lesions of the larynx; the higher risk of increased metastasis is based only on one animal experimental study, requiring further studies. The second issue was underestimating the value

of frozen sections, explaining that experienced laser surgeons do not use them routinely. This chapter also includes a synthesis of the classifications of endolaryngeal procedures for the year 2000 for the treatment of glottic dysplasia and carcinoma and its 2007 modification. A very important point in this chapter is that the essential prerequisite for endoscopic management of laryngeal and hypopharyngeal tumors is ensuring adequate patient compliance to a compulsive postoperative follow-up. The authors confessed that the use of endoscopic laser resection is discouraged for infiltrating anterior commissure carcinoma because of inadequate exposure and close proximity of the underlying cartilage and that supracricoid open partial procedures are more appropriate for these lesions. Their local control rates are clearly superior to those reported after laser excision. In the end, the authors illustrated some of the techniques for phonosurgical voice rehabilitation after cordectomies. With regard to swallowing dysfunctions, they showed data in favour of the superiority of the endoscopic laser approach, compared with open surgical approaches, in preserving swallowing.

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### **Acknowledgements**

#### **Conflicts of interest**

There are no conflicts of interest.

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