Complications in head and neck surgery

A total of 115 authors contributed to the writing of this textbook, most of them from the USA. The other contributors were from Canada, Egypt, Germany, and Italy. Besides otolaryngologists – that is, head and neck surgeons – experts in neurosurgery, ophthalmology, clinical medicine, and anesthesiology featured on the list of contributors. Among the contributors are eminent international figures like David Eisele and Richard Smith (editors), Wayne Koch, Kerry Olsen, Mark Courey, Haskins Kashima, Brent Senior, Lawrence Lustig, and others.

As complications are usually cited in Surgical Techniques textbooks as a section at the end of each topic, dedicating a whole textbook to complications is a great achievement that fills a large gap in the otolaryngology – head and neck surgery – library. Unlike what is understood from the title, this textbook covers the complications in all otolaryngology, head and neck surgery (OHNS) subspecialties, and beyond. The textbook includes 63 chapters divided into seven parts.

General topics are covered in Part I, in which 19 chapters are presented in 215 pages. Topics vary from anesthesia complications and wound healing to quality of life in patients with head and neck cancer. It includes chapters such as ‘Complications in interventional neuroradiology of the head and neck’, ‘Nutritional management in head and neck cancer’, and ‘Postoperative dysphagia’. Two chapters are dedicated to the complications of head and neck surgery in pediatric and geriatric populations. The chapter on pediatric complications emphasizes on some pathological entities such as choanal atresia, subglottic stenosis, lymphatic malformations, and branchial cleft anomalies. The chapter on geriatric complications includes sections on the implications of aging on tumor biology, surgical morbidity, nonsurgical therapy, and surgical reconstruction. Some chapters such as those on anesthesia complications or chemotherapeutic complications start with a full account on the topic before discussing the complications and their management. The chapter on ophthalmic and orbital complications is prepared by five authors, four of them being ophthalmologists. The discussion is not restricted to orbital hemorrhage or optic nerve injury but goes further from ocular pain to pupil abnormalities and eyelid malpositions. The chapter entitled ‘Endocrine complications of head and neck surgery’ contains, beside two large subsections on thyroid and parathyroid surgeries, a subsection on pituitary surgery, which is one of the strong points of this textbook. The chapter on neurosurgical complications is reasonably subdivided into complications related to vascular injuries, neural injuries, meninges, brain parenchyma injuries, and infections. The chapter on interventional neuroradiology complications gives valuable tips on important anastomoses between branches of the internal and external carotid arteries and special accounts on conditions such as paraganglioma, meningioma, and the ominous carotid blowout syndrome. The chapter on complications of radiation therapy deals with the day-to-day problems encountered by head and neck oncologic surgeons. Chapters on pain management and palliative medicine are among the strong areas of this textbook.

Part II, entitled ‘Salivary glands, oral cavity, and oropharynx’, consists of 10 chapters and 110 pages. The chapter on the complications of surgeries of the salivary glands is thorough and informative. The chapter on the complications of surgeries of the parapharyngeal space starts with a brief account on the different pathologies and approaches to this space. This section contains somewhat condensed chapters on the complications of lip, temporomandibular joint, oral cavity, and cleft palate surgeries. The chapter on the complications of oropharyngeal surgeries is further illustrated with some insights into the surgical techniques. This section also includes two chapters on two favorite topics: complications of tonsillectomy–adenoidectomy and complications of the surgeries for sleep disorders.
Part III, entitled ‘Larynx, trachea, and hypopharynx’, consists of six chapters and 82 pages. The section starts with a chapter on the complications of basic procedures such as flexible and rigid endoscopy; this is followed by a chapter entitled ‘Complications of percutaneous gastrostomy’. Although this procedure is not performed by otolaryngologists – head and neck surgeons – the chapter provides an excellent review for all specialists who use percutaneous endoscopic gastrostomy for their patients, including the techniques, indications and, of course, minor and major complications and their management. As otolaryngologists are often presented with injuries of the upper airway due to intubation, the chapter entitled ‘Complications of intubation and emergency airway management’ provides a 16-page review of the basic complications that every otolaryngologist should clearly understand. The discussion on nonrigid methods of airway management such as the use of supraglottic devices and video laryngoscopes as well as flexible fiberoptic intubation, is illustrative and constructive. The chapter on ‘Complications of laryngeal surgery’ focuses on complications related to laryngectomy, with emphasis on pharyngocutaneous fistula, dysphagia, aspiration, dysphonia, and stenosis. Sections are also dedicated to tracheoesophageal puncture, phonomurgery, and transoral laser microsurgery. The chapter entitled ‘Complications of tracheostomy and tracheal surgery’ details the complications of surgical tracheostomy, as well as those of percutaneous tracheostomy, which is being performed by many nonotolaryngologists. A subsection is dedicated to tracheal resection and its complications. The last chapter in this section focuses on complications of hypopharyngeal resection and reconstruction.

Part IV, entitled ‘Neck, thyroid, and parathyroid’, consists of five chapters and 80 pages. The first chapter in this section, written by W. Koch, gives not only details on the complications of neck dissection but also a full-illustrated account on the surgical technique of this intervention. The chapter entitled ‘Complications of endoscopic neck surgery’ focuses on complications seen after the newly introduced endoscopic thyroid or parathyroid surgery. The chapter entitled ‘Complications of surgery of the carotid artery’ mentions the basic complications from a vascular surgeon’s point of view, rather than from the point of view of a head and neck surgeon. Topics such as preoperative angiogram, balloon-occlusion studies, and stenting are not mentioned. The 23-page chapter entitled ‘Complications of thyroid surgery’ is one of the most interesting in this textbook. It details the main complication of thyroid surgery, which is recurrent nerve injury, and highlights the technique of intraoperative recurrent laryngeal nerve monitoring using an EMG endotracheal tube. Other complications of thyroideotomy are also fully detailed with their treatment principles. This section ends with a chapter on the complications of parathyroid surgery, detailing the wound, neurological, and endocrinological complications, which shows some redundancy compared with what has been mentioned previously in other chapters.

Part V, entitled ‘Nose, paranasal sinuses, and aesthetic surgery’, consists of 142 pages and 10 chapters. The second chapter in this section covers the subject of complications of sinus surgery in great detail. However, complications of balloon sinoplasty are not mentioned. An illustrated chapter on the complications of rhinoplasty follows, in which subsections are allotted to complications of surgeries of the nasal dorsum and nasal tip. Special chapters are dedicated to the complications of maxillectomy, trans-sphenoidal hypophysectomy, and facial trauma surgery. I did not realize the rationale behind including the chapter on facial nerve injury in this section; however, this chapter describes the different types of facial nerve injuries, their diagnosis, and management. The book also has chapters entitled ‘Complications of facial rejuvenation surgery’, ‘Complications of chemical peels, dermabrasion, and laser resurfacing’, and ‘Complications of facial implants’; these conditions are frequently encountered nowadays in otolaryngology practice.

Part VI, entitled ‘Skull base and ear’, consists of nine chapters and 84 pages. The first chapter, on complications of anterior skull base surgery, would have been better included in the previous section, and chapter 56, on general complications of ear surgery, would have been better positioned at the beginning of this section. A well-written chapter details the complications of acoustic neuroma surgery and their management. Another chapter covers the complications of cochlear implantation.

Part VII, entitled ‘Reconstructive surgery’, consists of 42 pages and four chapters. Logicall enough, one chapter was dedicated to each of the following subdivisions: pedicled flaps, local flaps, free-tissue flaps, and different types of grafts. This section covers the basic complications of reconstructive surgery and their management.

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