The Laryngoscope

Editorial

Historical Classics: Editorial

The two articles that are being reviewed are interesting in that they are in direct contrast to one another. The article by Rosen et al., "Advances in Office-Based Diagnosis and Treatment in Laryngology,"[1] is a "modern exposition" that is at the very extreme of technological advancements in the ability of laryngologists to diagnose and treat patients in an office setting using the most sophisticated equipment and technology available. In contrast, the article by DeSanto et al., "Cysts of the Larynx—Classification,"[2] published in 1970, has basically utilized a very tried and true historical examination of the anatomy, embryology, and histology of laryngeal cysts to develop a classification system that is still in use today. Both of these articles have contributed much to the literature and clearly deserve to be placed in the category of historical classics.

Laryngologists for years have been advancing the field by adopting new technologies as soon as they become available to the clinician. Rosen et al.'s article[1] is a contemporary review that summarizes a number of those advances as they pertain to the field of laryngology and provides a number of facets that illuminate this expanding field. As the authors describe, an office-based setting refers to an awake patient in the upright position who is able to provide phonatory feedback throughout the therapeutic intervention. The authors begin the article nicely discussing the historical background of visualizing the larynx and pharynx along with the development of endoscopic technology. They then summarize the discoveries of Oertel, who in the 19th century developed the first crude stroboscope for viewing the actual vibration of the vocal folds. The authors go on to describe distal chip technology, which provides reliable images nearly as good as rod-lens technology. They mention high-speed cinematography, which unlike the montage of stroboscopy can delineate complex vibratory motions of individual vibratory cycles, an outgrowth of which is kymography, which filters the light through narrow band imaging to accentuate vocal fold features. There is a nice section on anesthesia for office-based laryngology including the techniques utilized. It is a very complete description, and everyone new to the field should be able to use it as an important reference. There is a nice section on upper airway evaluation and treatment, including evaluation of the cricoarytenoid joint, bilateral vocal fold immobility, paradoxical vocal cord motion, and subglottic and tracheal stenosis. The review article then switches from imaging and measurement techniques to therapy, first using various types on in-office lasers such as flexible CO_2, thallium, pulse dye, and potassium-titanyl-phosphate. It then moves into vocal fold injection techniques and describes in great detail how they are accomplished in an office setting, although I am surprised there are no references for this section of the article. There is a discussion of transnasal esophagoscopy and finally a number of miscellaneous laryngeal procedures: biopsy, secondary tracheoesophageal puncture, superficial vocal fold injections, and a number of areas where Botox can be injected into the larynx. The authors summarize their article by saying, "Despite hurdles and unanswered questions many of the procedures described in the article are rapidly becoming the preferred technique in most laryngologist's hands and may in the future become the standard of care."[1] Clearly, this important article was prescient in its desire to present this to the practicing otolaryngologist.

The article by DeSanto et al.[2] is a wonderful article and demonstrates that utilizing only anatomy, embryology, and histology, physicians were able to develop important medical classifications and scientific studies that have stood the test of time. I think it goes without saying that the authors chose to ignore the classic pseudo cysts that we often see occur from vocal fold abuse in singers; instead, they chose to discuss true cysts of the larynx. The authors study involved a large amount of previously unreported material from the case files and tissue registry of the Mayo Clinic. The article begins with an historical review of cyst classification; what ensues is an extremely well-referenced review of the literature up to that time. It is clear that the authors have probably pulled every article that has ever been published on this subject matter at that time. Moreover, the article is illustrated with a number of very good hand-drawn pictures of the larynx, with the various cystic pathologies presented. In the histology section, the authors additionally comment on cystadenomas, a rare form of cystic change. In addition to congenital cystadenomas, the authors tip their hats to acquired, retention, epidermoid, or simply "other laryngeal cysts."[2] The scientific study itself is based upon a review of all cases of laryngeal cysts seen in the Mayo Clinic service for 19 years from 1945 to 1964. This accounted for 238 patients, of whom paraffin-blocked tissues were available for examination in 190. In addition, 10 normal larynges were studied for comparison. Interestingly, a total of 1,480 sections were examined from these 10 normal larynges to establish a concept of the normal gland duct system of the larynx, which I believe serves today as the most complete description present. Through this study, the authors were able to divide the glandular ducts into

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three types: collecting, interlobular, and intralobular. When comparing all of the patients to the normative data, the authors were able to divide cysts into three varieties: saccular cysts (with or without oxyphilia), ductal cysts (with or without oxyphilia), and thyroid-cartilage foraminal cysts. Interestingly, the authors describe a laryngocele different from a saccular cyst only in that it contains air, whereas the cyst contains mucus. As opposed to saccular cysts, ductal cysts are those found at any site within the larynx that results in mucus retention in the collecting ducts of the submucosal glands. The authors provide a number of case reports to illustrate their findings and discuss the accepted mode of treatment at that time. Whether some of those lesions that required open surgery could have been managed endoscopically today is unknown. Interestingly, the authors describe a thyroid cartilage foraminal cyst to be a distinct and extremely rare lesion; it is thought to be due to the subglottic laryngeal mucosa herniating through the persistent foramena occasionally seen in the anterior thyroid ala. Prior to this article, the classification for laryngeal cysts was quite complicated, and DeSanto et al., through anatomic study, histology, and examination of patient records, were able to develop a simple classification that has stood the test of time and is current even today.

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