Original Article

Medicolegal issues in head and neck practices

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ABSTRACT

Objectives: This study aims to investigate causes of malpractice claims in head and neck practices in order to create more awareness and to prevent future claims.

Patients and Methods: The database of the National Institute of Forensic Medicine (NIFM) was retrospectively reviewed between March 2005 and August 2017 and 219 malpractice cases related to the head and neck practices were found.

Results: Of the 219 cases 122 (55.7%) were female and 97 (44.3%) were male. Of these cases, 194 were related to surgical procedures and 25 were related to non-surgical procedures. The most procedures included thyroidectomy, followed by tonsillectomy and open neck biopsy. The most frequent causes of claims were dyspnea (n=53) and dysphonia (n=49) after thyroidectomy. Of the 219 cases, 57 (26%) received a unanimous verdict of 'malpractice' (deciding in favor of plaintiffs) by the NIFM grand jury. No delinquency was found in the other 162 cases (74%).

Conclusion: Physicians should be educated in the medicolegal aspects of malpractice and awareness should be raised accordingly. Despite the increasing number of studies, further research, collaboration with jurists and a universal language are required.

Keywords: Claim; complication; head and neck, malpractice, medicolegal, vocal cord paralysis.

Malpractice is described as negligence or misconduct that injures a patient who is treated under standard conditions by a physician or surgeon.[1] Our local medical association has announced that malpractice is also involved when a patient incurs harm due to lack of information, experience or attention, and that can include failure or delay in diagnosis, improper performance in complication of surgery or inadequate postoperative management.[2]

In recent years, malpractice litigations against physicians have increased.[3-5] Socioeconomic status of countries, innovations in medical practices, increased awareness in society, development of insurance systems, and high education level may be the cause of this increasing trend.[5]

Otorhinolaryngology (ORL) is a very broad specialty with different diseases and managements. Malpractice claims in head and neck surgery,[6] rhinology,[7] otology,[8,9] and facial plastics,[10,11] which are subspecialties of ORL, have been well documented. Additionally, malpractice trends in specific ORL

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Table 1. Cases were classified according to type of allegation

Classification of allegation
Improper performance (surgery or medical treatment)
Carelessness-imprudence
Inadequate postoperative management
Failure/delay in diagnosis
Unnecessary procedure

procedures such as endoscopic sinus surgery,[12] tonsillectomy,[13] laryngeal carcinoma surgery,[14] sleep surgery,[15] tracheal and laryngeal surgeries,[16] and salivary gland surgery[17] have been well reported. Increasing the number of such studies is a potentially valuable source of information on malpractice claims. For this reason, a more detailed analysis of the claims may emphasize their cause and thus help prevent their occurrence in the future.[6,18-20]

In this study, we sought to detect factors affecting allegations and verdicts of cases involving head and neck practices, in the hopes of establishing awareness for otolaryngologists and other physicians.

PATIENTS AND METHODS

The National Institute of Forensic Medicine (NIFM) is a consultative authority of the Ministry of Justice. Courts routinely refer all malpractice claims to the NIFM and ask for expert reports. In the NIFM, each file is investigated by a forensic medicine specialist and reviewed with a senior otolaryngologist. A final decision is given according to the patient's file and actual examination findings. The grand jury of the NIFM then adjudicate as to whether malpractice has occurred. The courts make their final statement according to the NIFM's report.

The NIFM database was investigated for malpractice claims between March 2005 and August 2017. Data of all malpractice cases associated with otorhinolaryngology were extracted. A total of 316 malpractice case reports were evaluated, and files related to rhinology, facial plastic and otology, or cases with incomplete documentation were excluded from the study. Two hundred-nineteen malpractice cases that involved surgical or medical treatments in head and neck region were separated. Data extracted included age, gender, diagnosis, treatment

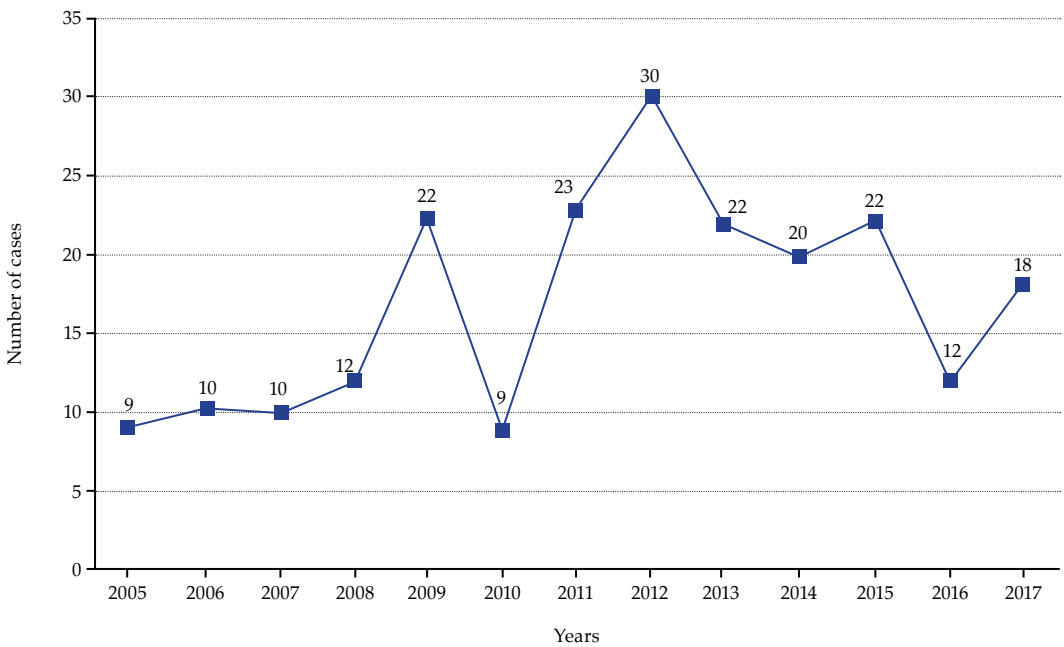

Figure 1. *Number of cases in head and neck practices by years.*

details, surgical note, plaintiff allegations and date of verdict. Cases were classified into medical or surgical treatment groups, and an analysis of the distribution of cases by year was performed.

Data were collected on plaintiff demographics, defendant specialty, procedure performed, plaintiff symptoms, cause of claim, distribution of files by years, treatment center and jury final report. Additionally, cases were classified according to type of allegation (Table 1).

The data were analyzed using the IBM SPSS; version 21.0 software (IBM Corp., Armonk, NY, USA).

This study was approved by the ethics review board of the Scientific Committee of the National Institute of Forensic Medicine (Ref number: 21589509/276).

RESULTS

Demographics

There were 219 malpractice files related to head and neck practices between March 2005 and August 2017. Of the 219 cases 122 (55.7%) were female and 97 (44.3%) were male. The average age of claimants was 26.2±18.5 years. The distribution of malpractice cases by year is shown in Figure 1.

Of the cases, 194 were related to surgical procedures and 25 were related to non-surgical procedures. The most procedures included thyroidectomy, followed by tonsillectomy and open neck biopsy.

Claims

The most frequent causes of claims were dyspnea (n=53) and dysphonia (n=49) after thyroidectomy. Following these were the need for additional procedure (n=40), death (n=29), unnecessary procedure (n=24), unsuccessful procedure (n=15) and delayed diagnosis (n=9) (Table 2).

Medical centers

Treatment centers where malpractice events occurred were: state hospitals (44.2%), private hospitals or clinics (36.5%), university hospitals (9.5%), and education and research hospitals (8.3%).

Judgement characteristics and final reports

Of the 219 cases, 57 (26%) received a unanimous verdict of 'malpractice' (deciding in favor of plaintiffs) by the NIFM grand jury. No delinquency was found in the other 162 cases (74%). Legal reasons of malpractice were classified as follows: Improper performance in 27 cases (21%), carelessness-imprudence in 19 cases (44%), inadequate postoperative

Table 2. Causes of malpractice claims

Causes of claims	n	%
Vocal cord paralysis	102	47
Dyspnea	53	
Dysphonia	49	
Need for additional procedure	40	18
Postoperative infection	12	
Postoperative bleeding	9	
Forgotten gauze pack after adenoidectomy	10	
Tracheostomy	3	
Esophageal trauma	2	
Tracheal trauma	2	
Velopharyngeal insufficiency	2	
Death	29	13
Bleeding after tonsillectomy	11	
Anaphylactic shock after penicillin therapy	5	
Tumor surgery	4	
Tracheostomy	3	
Foreign body intervention	3	
Others	3	
Unnecessary procedure	24	11
Medical treatment	7	
Nerve injury	6	
Parathyroidectomy	4	
Uvulectomy	3	
Tooth extraction	2	
Pharyngoplasty	1	
Submandibular gland excision	1	
Unsuccessful procedure	15	7
Sleep surgery	6	
Medical treatment	4	
Adenoidectomy	3	
Thyroidectomy	1	
Ventilation tube	1	
Failure/delay diagnosis	9	4

Table 3. Procedures that were in favor of plaintiff

Improper performance (n=27)	n	Carelessness-imprudence (n=19)	n	Inadequate postoperative management (n=5)	n	Failure/delay in diagnosis (n=3)	n	Unnecessary procedure (n=3)	n
Dyspnea	10	Dyspnea	13	Tonsillectomy	3	Head and neck cancer	3	Sleep surgery	2
Dysphonia	7	Dysphonia	2	Medical treatment	2			Parathyroidectomy	1
Open neck biopsy	3	Adenoidectomy	3						
Tonsillectomy	2								
Sleep surgery	2								
Medical treatment	1								

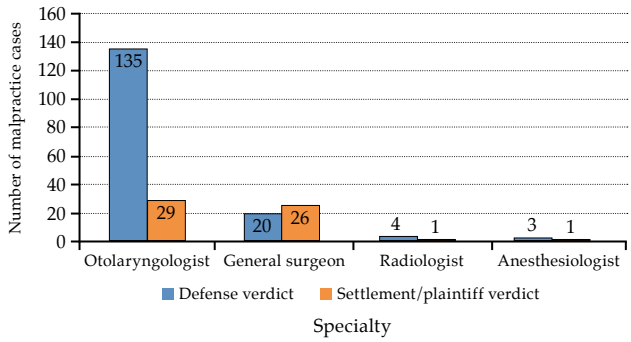

Figure 2. *The rates of malpractice decisions according to specialty.*

management in five cases (14%), failure/delay in diagnosis in three cases (10%), and unnecessary procedure in three cases (10%) (Table 3).

Specialties

Otolaryngologists were the most commonly involved group (n=164) followed by general surgeons (n=46), radiologists (n=5) and anesthesiologists (n=4). The rate of malpractice decision was 50.8% (29 of 57 cases) for otolaryngologists, 45.6% (26 of 57 cases) for general surgeons, 1.7% (1 of 57 cases) for radiologists and 1.7% (1 of 57 cases) for anesthesiologists (Figure 2).

DISCUSSION

Despite the fact that judicial systems regarding malpractice differ between countries, similar risks, issues, and outcomes exist, and physicians are typically unaware of the medicolegal aspects of their specialty until faced with a lawsuit alleging malpractice. Therefore, all physicians should at least be aware of common legal terms and medicolegal aspects of their specialty, and duties that both a plaintiff and a defendant have in a case of malpractice.

In our legal system, there are no substances in the field of criminal or civil law that regulate criminal and legal responsibility of physicians. In order for physicians to be legally accountable, an improper performance is needed. Investigation of malpractice claims is a technical matter and therefore the judge asks the expert doctors (member of NIFM) if there has been such a fault. In the present study, malpractice received a

unanimous verdict (result against the defendant) in 57 cases (25.9%). Simonsen et al.[6] reported that 44.3% of allegations resulted in a favor of the plaintiff. Award or settlement information could not be provided in our study, whereas Simonsen et al.[6] reported that the overall mean indemnity award was $128,238.

Our study shows that malpractice claims have increased over time. Reasons such as legal reforms, innovations in medical practices, increased awareness of society and the level of education, the development of the insurance system, and the sensitivity of the media can be responsible for this increasing trend. It is accepted that these factors will be discussed more in the future.[5,21]

Nikoghosyan-Bossen et al.[22] reported that disorders of the head and neck region were the most common malpractice claims in ORL lawsuits. Moreover, due to the complex anatomy and procedures of this surgical site, judgement is often complicated and time-consuming.[6,19,23] However, this period can be particularly stressful for the physician, causing burnout with a decrease in the overall quality of physical and mental health, and a decrease in career satisfaction. Furthermore, physician burnout can lead to poor judgment in patient care, less mercy and more hostility toward patients, and to a depressed commitment to quality of care.[20]

In our study, vocal cord paralysis due to thyroidectomy was the most common complication of malpractice claims in head and neck practices. Injury to the recurrent laryngeal nerve may be associated with aspiration, airway obstruction, dysphagia and dysphonia. As such, it might reduce quality of life and result in withdrawal from social life, decreased employment, and reduced health status.[24-26] Thus, symptoms related to vocal fold dysfunction are a prime target for litigation. Ta et al.[27] reported that dysphonia (85%; n=89/105) was the most common claim in damage to the recurrent laryngeal nerve. In contrast, our study showed that the most common claim was dyspnea, followed by dysphonia. Becoming a plaintiff may be affected by the socio-economic, socio-cultural, and intellectual status of potential claimants.

Our analysis revealed that second highest incidence was death and this result was most commonly associated with tonsillectomy. Tonsillectomy/adenotonsillectomy is one of the most common surgical procedures in ORL.[28,29] A number of circumstances can lead to morbidity and mortality when a tonsillectomy is performed, including bleeding, airway burns, mucosal tears, broken teeth, and hypoxic events. A number of studies looked at the complications of tonsillectomies and the resulting legal consequences, which demonstrated that bleeding and burn injuries were the most commonly reported adverse events.[30] We found that death was secondary to postoperative bleeding. Similarly, Stevenson et al.[31] found that patient death occurred in 72 cases (40.4%) of tonsillectomy malpractice claims and that was most frequently related with postoperative hemorrhage (54.2%).

According to the NIFM, improper performance represents the largest source of allegations in this series. However, Simonsen et al.[6] reviewed 315 malpractice claims of head and neck surgery, in which perioperative complications (53.7%) and delay or missed diagnosis (34.6%) was reported as the most common reasons for payment to the plaintiff. However, failure/delay in diagnosis constituted only 4% of the claims in our study. Windford et al.[32] reported that technical negligence (38%) was the most common cause of malpractice in the treatment of sinonasal disease, although multiple causes were present in many of the cases. The result of another study associated with malpractice of endoscopic sinus surgery showed that improper performance (76%) was the main reason for malpractice suits, followed by lack of informed consent (37%), unnecessary surgery (27%), failure to diagnose (7%), and death (5%).[32] Hong et al.[33] found that improper performance and failure in the management of disease were the most commonly cited legal allegations. Another study showed that improper performance accounted for more than one half of the total monies paid for malpractice indemnity.[33] Lydiatt[19] reported that delay of or missed diagnosis of cancer was alleged in 43 of 50 cases (86%) overall, and in general practice, dentists, and otolaryngologists it was 100%, 85%, and 89%, respectively. However, Lydiatt's[19]

results are quite high compared with ours (4%) and those of Simonsen et al.[6] (34.6%).

There are some limitations to our paper. Our cases were reported by the Institute of Forensic Medicine as the superior commission. These decisions do not include punitive or monetary awards to plaintiffs from courts. Therefore, our study does not include any information about outcomes of claims. Some studies reported that demographic findings such as education level,[6,19,20,34] age,[14,34,35] and nationality[36] affected rates of malpractice claims. However, our analysis only revealed the age information of patients, and the failure to report other factors is another limitation of our study.

In conclusion, malpractice claims in head and neck practices occupy in a wide range. Among these practices, thyroidectomy is the most frequent one that causes malpractice claims as we also observed in this study. In addition, tonsillectomy is the most common cause of death and the second most common cause of malpractice claims. Besides otolaryngologists, different physicians, such as general surgeons, radiologists and anesthesiologists that practice in the head and neck region should also be cautious in terms of malpractice claims. Therefore, physicians should be educated in the medicolegal aspects of malpractice, and awareness should be raised accordingly. Despite the increasing number of studies, further research, collaboration with jurists, and a universal language or guideline are required.

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