

## ORIGINAL ARTICLE

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## Medical malpractice allegations related otolaryngologists

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## Abstract

This study aims to raise the awareness of otolaryngologists regarding medical malpractice allegations. Among the files adjudicated between 01/01/2012 and 31/12/2015 by the First Specialization Board of The Council of Forensic Medicine, cases with malpractice allegations accused of otolaryngologists were analyzed retrospectively. Fifty-seven cases were included in the study. Thirty-six cases (63.2%) were male, 21 cases (36.8%) were female. The mean age was 32.87±20.3 years (1-84). The cases were mostly in the 18-39 age group (n=22, 38.6%). The event subject to the claim occurred most frequently in the state hospital (n=24, 42.1%). In 57 cases, a total of 68 otolaryngologists were accused of malpractice. The most common diagnoses made in the health institution were trauma (n=13, 22.8%) and respiratory tract infection (n=10, 17.5%). Otolaryngologists were most frequently blamed for inadequate treatment (n=25, 26.3%) and lack of indifference (n=15, 26.3%). Surgical treatment was performed on 26 patients (45.7%). The most common operations were septorhinoplasty and tonsillectomy. Complications occurred in 73.7% of the cases. The board's opinion was that only 10.5% of the cases had malpractice. A comprehensive review of the medical malpractice allegations will contribute to a better understanding of these cases and necessary strategies to reduce possible claims and improve health services.

**Keywords:** Malpractice, otolaryngology, trauma, complications, forensic medicine

## Introduction

Allegations of medical malpractice are becoming more and more of a problem for physicians. The Burnout Syndrome caused by the increasing daily work stress and heavy working conditions and the unrealistic increase in the requested amounts of indemnity creates the fear among the physicians that the profession will become unsustainable over time [1]. Increasing work stress affects physicians' professional and personal lives, sometimes even disrupting their health. It has been proven that the psychological well-being of the physicians who are alleged medical malpractice is worse than that of others [2]. Surgical branches are more likely to be exposed to medical malpractice risk than internal branches. Otorhinolaryngologists are not an exception to this situation, as they work in areas with complex anatomy of the head and neck [3].

Physicians turn to defensive medicine with the motto "do something, not nothing, do more, not less" to avoid malpractice claims [4]. Defensive medicine practices in high-risk branches have increased up to 93% [5]. In addition, physicians who acquire defensive medicine habits due to the malpractice environment cannot easily give up their practices because they do not feel completely safe, even if malpractice allegations decrease [4]. Worse still, physicians in Turkey have to contend with both compensation and criminal cases against allegations of medical malpractice [6].

The medical malpractice claims should be analyzed in detail to reduce and prevent medical malpractice claims that may have severe consequences for the physicians. This study aimed to increase the knowledge and awareness regarding cases with medical malpractice allegations by presenting malpractice claims to otolaryngologists.

## Materials and Methods

**Sampling:** In the present study, the allegations of medical malpractice reported by the First Specialization Board of The Council of Forensic Medicine between 2012 and 2015 were evaluated. Cases in which otolaryngologists were accused of medical malpractice were included in the study.

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**Diagnostic Methods:** Case files are sent by the judicial authorities to the First Specialization Board of The Council of Forensic Medicine for the evaluation of the allegation of medical malpractice. Case files that are received to the board are examined by a rapporteur on the board. After the first assessment, the rapporteur requests any missing medical documents, statements of witnesses, defendants, complainants, radiological images, and medical reports from the judicial authority. After the missing documents are obtained, the rapporteur prepares a preliminary report on the case file to submit to the board. The Board decides whether there is medical malpractice by re-evaluating the preliminary report and the documents in the case file. Then, a final report stating whether there is medical malpractice is sent to the judicial authorities.

**Data Collection and Processing:** The cases included in the study; the parameters of age, gender, health institution, academic title of the physician, being a primary or consultant physician, whether complications developed or not, the diagnosis made in the health institution, the reason for the complaint, whether surgical treatment was applied, whether there was medical malpractice, and the cause of medical malpractice were evaluated. The present study was a retrospective study that included no identifying data or human/animal subjects, so informed consent was not required. All study procedures were performed after obtaining the scientific and ethical approval of the Ministry of Justice Council of Forensic Medicine dated 23.02.2016 and numbered 21589509/77. The study was conducted by the principles of the Helsinki Declaration of 1964, as revised in 2013.

### Statistical Analysis

Statistical Package For Social Science SPSS, version 21.0 (IBM SPSS Statistics for Window, Version 21.0, Armonk, NY: IBM Corp.) statistics program was used for data analysis of the study. Descriptive statistics are presented with frequency, percentage, mean, standard deviation (SD), minimum (min), and maximum (max) values.

### Results

Fifty-seven cases were included in the study. Thirty-six (63.2%) cases were male, 21 (36.8%) cases were female. The mean age was  $32.87 \pm 20.3$  (min:1, max:84) years, and the cases were mostly in the 18-39 age group (n= 22, 38.6%) (Table 1). The event subject to the complaint occurred most frequently in the state hospital (n=24, 42.1%). In 57 cases, 68 otolaryngologists (Fifty-three specialists, six professors, four residents, three associate professors, and two assistant professors) were accused of malpractice. In 20 cases (35.1%), physicians participated in the treatment of patients as consultant physicians. The most common diagnoses were trauma (n=13, 22.8%) and respiratory tract infection (n=10, 17.5%). Otolaryngologists were most frequently accused of inadequate treatment (n=25, 26.3%) and lack of attention (negligence, indifference, rude manners, etc.) (n=15, 26.3%) in terms of complaint reasons (Table 1).

Surgical treatment was performed in 26 (45.7%) patients. The most common operations were septorhinoplasty and tonsillectomy (Table 2). Complications occurred in 73.7% of the cases. The most common complications were cardiac complications (n=12, 21%) and postoperative bleeding (n=7, 12.3%) (Table 2). The board prepared a report stating there was medical malpractice in

six cases (10.5%) according to current otolaryngology practice algorithms (Table 3).

**Table 1.** Distribution of age groups, healthcare institution, diagnosis, and reasons for complaint

| Age groups                                                       | n         | %          |
|------------------------------------------------------------------|-----------|------------|
| 0–17 years                                                       | 14        | 24.6       |
| 18–39 years                                                      | 22        | 38.6       |
| 40–59 years                                                      | 15        | 26.3       |
| ≥ 60 years                                                       | 6         | 10.5       |
| Healthcare institution                                           |           |            |
| Public hospital                                                  | 24        | 42.1       |
| Training and research hospital                                   | 9         | 15.8       |
| University hospital                                              | 6         | 10.5       |
| Private hospital                                                 | 18        | 31.6       |
| Diagnosis                                                        |           |            |
| Trauma                                                           | 13        | 22.8       |
| Respiratory tract infections                                     | 10        | 17.5       |
| Septal deviation                                                 | 7         | 12.3       |
| Acute otitis media                                               | 4         | 7          |
| Goiter                                                           | 2         | 3.5        |
| Tongue base carcinoma                                            | 2         | 3.5        |
| Sinusitis                                                        | 2         | 3.5        |
| Adenoid hypertrophic vegetation                                  | 2         | 3.5        |
| Others*                                                          | 15        | 26.4       |
| Reason for complaint                                             |           |            |
| Insufficient treatment                                           | 19        | 33.3       |
| Lack of attention (negligence, indifference, rude manners, etc.) | 15        | 26.3       |
| Misdiagnosis                                                     | 7         | 12.3       |
| Failure to diagnose on time                                      | 6         | 10.5       |
| Delay in the initiation of therapy                               | 3         | 5.3        |
| False treatment                                                  | 3         | 5.3        |
| Lack of monitoring/follow up                                     | 3         | 5.3        |
| Deficiency of diagnostic test                                    | 1         | 1.7        |
| <b>Total</b>                                                     | <b>57</b> | <b>100</b> |

\* Tympanic membrane perforation, triglossal duct cyst, laryngeal stenosis, parotid gland inflammation, cerebral hemorrhage, vocal cord paralysis, foreign body in the ear, retropharyngeal abscess, traumatic facial paralysis, laryngeal squamous carcinoma, anaphylaxis, cerebrovascular disease, recurrent medullary carcinoma, adenoiditis, healthy....etc

**Table 2.** Distribution of the surgical procedure and diagnosis of complications

| Surgical procedure                     | n         | %          |
|----------------------------------------|-----------|------------|
| Septorhinoplasty                       | 8         | 30.8       |
| Tonsillectomy                          | 6         | 23.1       |
| Parathyroidectomy and neck dissection  | 2         | 7.7        |
| Thyroidectomy                          | 2         | 7.7        |
| <b>Cystectomy and abscess drainage</b> | 2         | 7.7        |
| Adenoidectomy                          | 2         | 7.7        |
| Others1                                | 4         | 15.3       |
| <b>Total</b>                           | <b>26</b> | <b>100</b> |
| Diagnosis of complications             |           |            |
| <b>Cardiac complications</b>           | 12        | 28.6       |
| Postoperative hemorrhage               | 7         | 16.7       |
| Meningitis                             | 5         | 11.9       |
| Bilateral vocal cord paralysis         | 3         | 7.1        |
| Anaphylaxis                            | 3         | 7.1        |
| Hypoxic ischemic encephalopathy        | 2         | 4.8        |
| Others2                                | 10        | 23.8       |
| <b>Total</b>                           | <b>42</b> | <b>100</b> |

<sup>1</sup>Laryngeal web dilatation, mandible fracture repair, myringoplasty, laser excision of polypoid leonid mass. <sup>2</sup>Hemiplegia, tracheal stenosis, atelectasis, multiple organ failure, aspiration pneumonia, laryngospasm, tracheoesophageal fistula, sepsis, pneumonia, brain abscess, tracheal rupture

**Table 3.** Cases with medical malpractice

| Age | Gender | Health Institution             | Health complaints       | Diagnosis           | Cause of death                                                | Academic title      | Cause of medical malpractice                                                                                                                                                                                                                                           |
|-----|--------|--------------------------------|-------------------------|---------------------|---------------------------------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Female | Public Hospital                | Foreign body aspiration | Healthy             | Asphyxia due to foreign body aspiration                       | Specialist          | The patient was sent home instead of being referred to a tertiary health institution.                                                                                                                                                                                  |
| 50  | Male   | Public Hospital                | Weakness                | Cerebral hemorrhage | Aneurysmatic subarachnoid hemorrhage                          | Specialist          | The physician diagnosed cerebral hemorrhage and discharged the patient instead of consulting and referring                                                                                                                                                             |
| 54  | Male   | Public Hospital                | Trauma                  | Trauma              | Trauma                                                        | Specialist          | The patient was discharged with undiagnosed bone fractures by a physician                                                                                                                                                                                              |
| 6   | Male   | Public Hospital                | Trauma                  | Trauma              | Crimean-congo hemorrhagic fever (CCHF)                        | Specialist          | Afterward operation due to trauma, bleeding and fever developed while being followed in the service. A diagnosis of CCHF was made as a result of the autopsy and PCR test performed. The patient was infected with CCHF in the hospital and was not diagnosed on time. |
| 13  | Male   | Public Hospital                | Trauma                  | Trauma              | Vocal cord paralysis after laryngeal subglottic region injury | Specialist          | The patient was transferred by ambulance but the physician referred the patient under inappropriate conditions with a lack of intubation/tracheostomy.                                                                                                                 |
| 28  | Female | Training and Research Hospital | Earache and headache    | Acute otitis media  | Brain abscess and its complications                           | Associate Professor | Not requesting neurosurgery consultation and cranial tomography scan from the patient diagnosed with otitis media who had vomiting and headache during hospitalization                                                                                                 |

## Discussion

In a study examining malpractice claims after rhinoplasty using the Westlaw database, 16 (69%) of 23 subjects were female [7]. In a study on malpractice claims in sinonasal diseases, 53% of the plaintiffs were women (n=80) [8]. In a paper examining cases with cranial nerve injury, 55% (n=115) of the victims were female, and 45% (n=94) were male [9]. Contrary to the literature, more than half of the cases in our study were male. The cause may be, the most common diagnosis in current study was trauma, and all cases resulted in death.

In malpractice allegations involving otolaryngologists, the average age of victims is usually in the fourth decade [8-14]. In a study of 315 cases alleged medical malpractice, the mean age of the cases was 48, and the most common age range was 36-45 (n=68, 42.6%) [11]. In this study, the mean age was 32.87±20.3 (min:1, max:84), and the cases were mainly in the 18-39 age group (n= 22, 38.6%), and the mean age of the cases was lower contrary to the literature.

Almost half of the malpractice claims resulting in death related to obstetrics occurred in private hospitals (48%). Considering all malpractice claims of gynecology, public hospitals (40%) were the most common health institutions [15,16]. Consistently, malpractice claims about pediatricians occurred most frequently in public hospitals, while malpractice claims resulting in death occurred most frequently in private hospitals [17,18]. Almost half (45.7%) of malpractice allegations resulted in death against general surgeons occurred in a public hospital [19]. In this study, the medical event that caused the malpractice claim happened most frequently in public hospital. We think that this situation is related to the high number of specialists working and the heavy working conditions in the public hospital.

In Turkey, regardless of the clinical branch, specialists face malpractice claims most frequent cause of higher number of them [17,19]. In the present study, the majority of the physicians (77.9%) were specialists, in line with the literature.

Defensive behaviors such as worrying about malpractice allegations and request for consultation have become quite common among physicians [5]. Kayabaşı and Gül reported that 17% of otolaryngology consultations requested were unnecessary [20]. The consultant has to inform the primary physician in writing clearly and understandably regarding opinions on the patient, his diagnosis, and the most appropriate treatment method to be followed [21,22]. More than one-third (35.1%) of the accused physicians in this study participated in treatment as consultants.

Svider et al. reported the most frequently malpractice claimed procedures were blepharoplasty, rhinoplasty, rhytidectomy, and facial bone fracture repair, respectively in their study on facial surgery [23]. Hong et al. demonstrated that otolaryngologists were most frequently accused of malignancies (21.2%) [3]. The study of Üzün et al. reported that trauma was the most common diagnosis [19]. In this study, the most common diagnosis made in the health institution was trauma (n=13, 22.8%). The fact that the study included only cases resulting in death may explain the high incidence of trauma diagnosis.

Kovalerchik et al. reported that 88.9% of cases complained of additional surgery, and 44.4% of them complained of not being able to diagnose complications on time [24]. Hong et al. demonstrated that otolaryngologists were accused of malpractice due to failure to diagnose (51.5%) most frequently [3]. In a study of 6383 malpractice cases closed with indemnity payments, physicians most frequently had to pay indemnity for problems related to surgery (62%), diagnosis failure (17%), and issues with treatment (13%) [25]. The most common cause of claims in a ten-year malpractice study was incorrect surgical procedure (49%) and failure in diagnosis, referral, and treatment (32%) [26]. The vast majority of malpractice claims associated with laryngeal and oral cancers resulted from problems related to the diagnosis [12,14]. The most common claims against otolaryngologists in the United Kingdom (UK) were error or delay in treatment (24.5%), error or delay in diagnosis (18.7%), and informed consent issues (%14.7)

[27]. Claims of malpractice related to rhinoplasty were frequently caused by a technical error (69.6%), unsatisfied results (39.1%), and inadequate follow-up or care (30.4%) [7]. Complications (53.7%) and misdiagnosis (34.6%) in head and neck surgery were the most common claim [11]. In the present study, physicians were accused of lack of treatment (n=25, 26.3%) and lack of attention (negligence, indifference, rude manners, etc.) (n=15, 26.3%) (Table 1). Considering that our study includes cases that resulted in death, it can be expected that people who lost their relatives claim that the physician does not show enough care and does not provide adequate treatment. For this reason, we think that physicians should ensure good communication with both patients and their relatives and pay maximum attention to the patient's participation in treatment.

Hong et al. reported that head and neck surgery was performed only in 20.2% of the cases [3]. Ceremsak et al. reported that otolaryngologists most frequently encounter malpractice allegations after endoscopic sinus surgery, tonsillectomy, and thyroidectomy operations [26]. In UK, Malpractice claims were commonly related with endoscopic sinus surgery and mastoid surgery [27]. In head and neck surgery, neck mass excision and parotidectomy are the two most common surgical procedures in cases with malpractice claims [11]. In this study, surgical treatment was applied to 45.7% of the cases, and the most common operations were septorhinoplasty (14.8%) and tonsillectomy (10.5%) (Table 2).

Complications developed in 6% of the malpractice claims regarding otolaryngologists [26]. A surgical complication developed in 65% of malpractice cases reported to result in indemnity [28]. Complication development seems to be closely related to a compensation payment. Complications were observed in 73.7% of the cases in this study. The most common complications were cardiac complications (n=12, 21%), followed by postoperative bleeding (n=7, 12.3%) (Table 2).

Blake et al., reported that physicians won 63.8% of otology-related malpractice allegations [10]. On the other hand, 31.35% of the allegations regarding rhinology resulted in payments [29]. In rhinoplasty operations, 87% of malpractice allegations were closed in favor of the physician [7]. Physicians paid compensation in 38.4% of head and neck surgery-related allegations [11]. In a study of 137 malpractice claims, accused physicians had to pay compensation in 70.8% of the cases [28]. In the UK, 49% of otolaryngologists accused of malpractice had to pay compensation [27]. Hong et al. reported that 42% of otolaryngologists paid indemnity [3]. Unlike all these, in another study, it was determined that 89.3% of the physicians were wrongfully accused and did not pay compensation [26]. In this study, medical malpractice was adjudicated in only 10.5% of the allegations by the board (Table 3). In other words, 89.5% of physicians were wrongfully accused.

This study has some limitations. This study just includes cases that resulted in death. Therefore, it does not reveal all malpractice claims in their entirety. In addition, the inability to reach the tribunal sentence is another limitation. The Council of Forensic Medicine is an official appraisal institution of malpractice. Therefore, the judgments are not binding on the courts. Courts may also request one more appraisal report from other boards, such as those found at universities. It should be noted, this study

focused on why physicians faced medical malpractice allegations rather than which the decision was made.

## Conclusion

Despite the limitations of this study, it is the first published study that includes malpractice allegation data related to otolaryngologists across Turkey. A comprehensive review of medical malpractice allegations will contribute to raising awareness of physicians for causes and precautions. More than one-fifth of malpractice claim cases were trauma patients (n=13, 22.8%). Physicians were most frequently accused of lack of treatment and attention (negligence, indifference, rude manners, etc.) by the relatives of the patients. The death of patient raises suspicion in the relatives of the patient due to probability of indifference or inadequate treatment. That's why physicians should establish good communication with both patients and their relatives, and pay maximum attention to the patient's participation in treatment. The majority of physicians (89.5%) were wrongfully accused according to the board reports. Malpractice laws are needed to prevent unjustified lawsuits if considering the long-lasting litigations and negative effects on the physician.

## Conflict of interests

*The authors declare that there is no conflict of interest in the study.*

## Financial Disclosure

*The authors declare that they have received no financial support for the study.*

## Ethical approval

*All study procedures were performed after obtaining the scientific and ethical approval of the Ministry of Justice Council of Forensic Medicine dated 23.02.2016 and numbered 21589509/77. The study was conducted by the principles of the Helsinki Declaration of 1964, as revised in 2013.*

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