



# Malpractice Claims in Ophthalmology: A 10-Year Review

## Oftalmolojide Tıbbi Uygulama Hataları: 10 Yıllık Veriler

Mehmet Hakan Özdemir, İsmail Özgür Can, Nilüfer Koçak\*

Dokuz Eylül University School of Medicine, Department of Forensic Medicine, İzmir, Turkey

\*Dokuz Eylül University School of Medicine, Department of Ophthalmology, İzmir, Turkey

### Summary

**Objectives:** In the literature, there are a limited number of studies related to medical litigation in ophthalmology. We aimed to reveal and discuss the profile of medical malpractice claims and liability of clinicians involved in ophthalmology cases.

**Materials and Methods:** We retrospectively reviewed 1531 malpractice claims reported by the Supreme Health Council of Turkey between 1991 and 2000; 59 (3.85%) were related to ophthalmology, and 57 cases could be included in the study. Data including patients' age, sex, diagnoses, and malpractice claims of judgment, distribution of ophthalmologic subspecialties and results of surgical/medical interventions, and the distribution of liability of health workers in these reports were collected.

**Results:** Most frequently encountered ophthalmologic events which resulted in malpractice claims were: cataract surgery ranked first with 19 malpractice claims (33.3%) followed by traumatic injuries of the eye (15.8%), and erroneous reporting (15.8%). Health personnel were found at fault in 38.6% of the claims. Of the cases, 36.8% were placed in private clinics and hospitals. Lack of care was mostly observed in state hospitals than in private ones. Medicolegal autopsy was performed on 6 of the cases among 8 deaths.

**Conclusion:** These findings would contribute to the data about the profile of medical malpractice claims related to ophthalmology. Revealing the data could be helpful for preventing malpractice claims and faults at similar medical conditions. (*Turk J Ophthalmol* 2014; 44: 1-5)

**Key Words:** Ophthalmology, malpractice, medicolegal

### Özet

**Amaç:** Oftalmoloji alanında tıbbi uygulama hatalarıyla ilgili sınırlı sayıda araştırma bulunmaktadır. Türkiye'de tıbbi uygulama hataları iddialarında yasal makamlara bilirkişilik görevi Yüksek Sağlık Şurası tarafından da yapılmaktadır. Bu çalışmayla, yasal makamların resmi talebi üzerine oftalmoloji alanındaki tıbbi uygulama hataları iddiasıyla Yüksek Sağlık Şurası'nın görüş verdiği erişkin ve çocukluk yaş grubu olgularının profilinin ortaya konulması ve hekimlerin kusurlu bulunma durumlarının tartışılması amaçlandı.

**Gereç ve Yöntem:** 1991-2000 yılları arasında Yüksek Sağlık Şurası'na görüş verilen 1531 olgunun kayıtları retrospektif olarak incelendi, tıbbi uygulama hatası iddialarının 59'u (%3,85) oftalmoloji alanıyla ilgiliydi, 57'si çalışmaya alındı. Bu olgular; yaş, cinsiyet, tıbbi girişimin türü, sonuçları, oftalmolojik alanlara göre dağılımı, olguların tanıları, bilirkişi görüşleri ve kusurlu bulunma oranları yönünden incelenerek değerlendirmeye alındı.

**Bulgular:** Ortalama yaş 26,46±20,35 yılı, %63,6'sı erkekti. En sık rastlanılan iddialar sırasıyla; 19 olguyla (%33,3) katarakt cerrahisi, gözün travmatik yaralanmaları (%15,8) ve hatalı/yanlış rapor düzenleme (%15,8) iddialarıydı. İddiaların % 38,6'sında sağlık çalışanları kusurlu bulundu. Olayların % 36,8'inin özel kliniklerde veya hastanelerinde olduğu gözlemlendi. Dikkat eksikliğine, devlet hastanelerinde özellerden daha çok rastlanırken, yasal düzenlemelere uygun davranmama özel kliniklerde ve özel hastanelerde daha çok karşılaşılan bir durumdur. Olguların sekizinin ölümle sonuçlandığı ve altısına otopsi yapıldığı belirlendi.

**Sonuç:** Bulgularımız, oftalmoloji alanındaki tıbbi uygulama hataları iddialarıyla ilgili verilere katkı sunmaktadır. Verilerin gözden geçirilmesi benzer tıbbi durumlarda tıbbi uygulama hatalarının ve iddialarının önlenmesi için yararlı olacaktır. (*Turk J Ophthalmol* 2014; 44: 1-5)

**Anahtar Kelimeler:** Oftalmoloji, tıbbi uygulama hatası, medikolegal

## Introduction

The frequency of ophthalmologic events resulting in malpractice claims and the malpractice claims that are taken to the court process show various rates.<sup>1-2</sup> In the literature, there are a limited number of studies related to medical litigation in ophthalmology.<sup>2-4</sup> Most of the malpractice claims resolved out of the court and ophthalmologists were found at fault in rare cases.<sup>3-5</sup>

A review of the literature showed that cataract was the primarily reason (varies 1/4 from to 1/2) among ophthalmologic conditions involving malpractice claims.<sup>1-7</sup> In a study based on the data of the National Health Service of England for the period 1995 to 2006, ophthalmology claims accounted for 2.5% of the total malpractice claims, and cataract treatment was found as the leading cause of the claims.<sup>1</sup> A study conducted in Spain considered that most of the claims were rebutted or resolved out of the court and found no criminal case.<sup>6</sup> Tomkins stated that 1/3 of the claims resulted in a settlement.<sup>5</sup>

The organization whose expert opinion for medical malpractice claims is requested by legal authorities (judges, prosecutors) in Turkey is the Supreme Health Council (SHC), affiliated with the Ministry of Health. The SHC is an official body like National Health Services whose expert opinion needs to be taken in claims related to criminal law suits and also action for compensation. The SHC examines medical records sent by legal authorities and gives expert opinion.<sup>8,9</sup>

In the present study, we aimed to reveal and discuss the profile of medical malpractice claims and liability of clinicians involved in ophthalmology cases in adults and children reported to the SHC. We reviewed the expert opinions related to malpractice claims and formed a database to reveal medical litigation in ophthalmologic cases.

## Materials and Methods

Expert opinions related to malpractice claims to the SHC were retrospectively reviewed. Out of 1531 malpractice claims reported by the SHC of Turkey between the years 1991-2000, 59 (3.85%) were related to ophthalmology. Data including patients' age, sex, diagnoses, malpractice claims of judgment, distribution of ophthalmologic subspecialties, types and results of surgical/medical interventions, whether sequel/death occurred or whether autopsy was performed, expert opinion of claims, and the distribution of liability of health workers in these reports were collected. The data obtained were evaluated by using SPSS 15.0 statistics program.

## Results

We reviewed 59 (3.85%) cases among 1531 malpractice claims reported by the SHC of Turkey between 1991 and 2000. We excluded two cases because of limited medical records and medicolegal reports reviewed. Remaining 57 cases had a mean age of  $26.46 \pm 20.35$  years (range: (2-74 yrs), and 63.6% were male.

Of the cases, 78.7% resulted in crime lawsuits. More than half of the (58%) ophthalmologic events tend to malpractice claims occurred in the three biggest cities of Turkey.

Most frequently encountered ophthalmologic events that resulted in malpractice claims were: cataract surgery ranked first with 19 malpractice claims (33.3%) followed by traumatic injuries of the eye (ophthalmologic emergencies) (15.8%), and preparing erroneous reports (15.8%). Manner of events that led to malpractice claims was classified as unintentional events, intentional events (interpersonal violence), disobeying legal responsibilities (preparing erroneous reports), and others (Figure 1).

Table 1 shows the distribution of malpractice claims brought into the court. Claims referred to the court were determined according to the Penal Code.

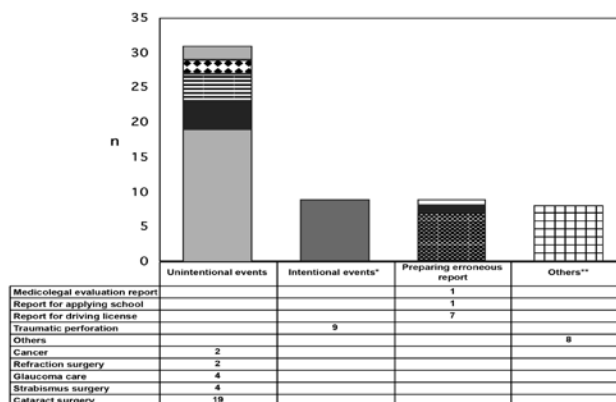
All of the cases brought into the court related to forgery of medical documenting and negligence of duty were found liable by expert opinion of the SHC.

As for the distribution of medical conditions involved in malpractice claims by ophthalmological subspecialties, 4 cataract surgery cases, 1 glaucoma surgery case, 2 trauma cases, 2 strabismus cases, 8 preparing false report cases, 2 oncology cases, 2 iatrogenic trauma cases, and one out of ophthalmology case were deemed to be at fault by the SHC. In cataract surgery treatment cases, allegations related to intraocular lenses (IOL) like selecting wrong type of lens, postoperative lens dislocation, endophthalmitis, retinal detachment, vitreous loss accounted for 16 of the cases.

Wrong side eye evisceration was performed in one case with the diagnosis of retinoblastoma.

Ophthalmologists were not found liable in the areas of oculoplastics, medical retina, vitreoretinal surgery, uveitis, refractive surgery.

Figure 2 shows the distribution of outcomes of interventions according to ophthalmologic subspecialties. There was significant relation between ophthalmologic subspecialties and outcomes of interventions ( $p < 0.05$  ( $\chi^2 = 11.633$ ;  $p = 0.020$ ).

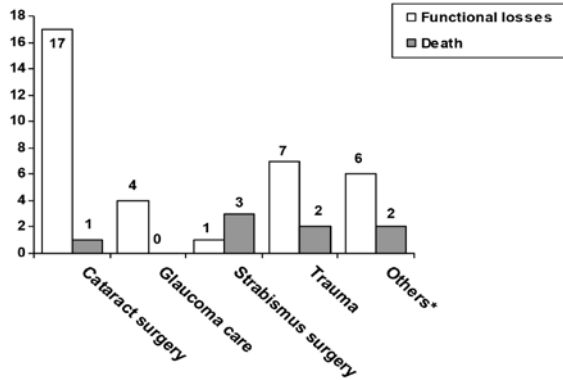


**Figure 1.** Distribution of events resulted to malpractice claims by ophthalmic conditions

\*Motor vehicle accidents, stabbing injuries, gunshot injuries

\*\*Infection, Premature oxygen apply, iatrogenic cornea perforation, out of ophthalmology

Of the cases, 36.8% was placed in private clinics or private hospitals. When the place of the event (private or official) was investigated: lack of care was mostly observed in state hospitals than in private ones (6 to 0 cases), and failure to obey the legal procedures was observed mostly in private clinics or private hospitals than in state hospitals (7 to 2 cases). ( $\chi^2=10.880$ ;  $p=0.028$ ) The health personnel was found faulty in 22 events, 11 of which occurred in private clinics or hospitals.

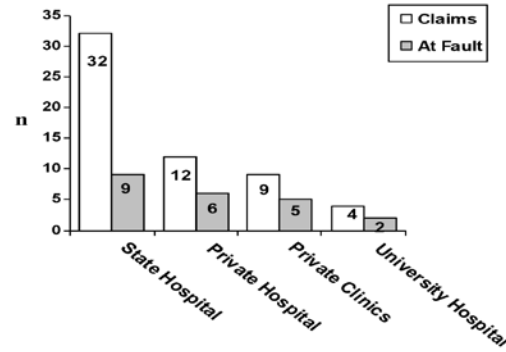


**Figure 2.** Distribution of outcomes of interventions by ophthalmologic subspecialties  
\*Oncology ocular emergencies out of ophthalmology

Figure 3 illustrates the distribution of health centers where the ophthalmologic events tended to malpractice claims by the expert opinion of the SHC. There was no significant relation between health personnel’s liability and health centers.

Distribution of health personnel found liable by expert opinion of the SHC is shown on figure 4.

There was not any significant difference between health personnel occupational area and liability ( $\chi^2=9.567$ ;  $p=0.71$ ) (Figure 4).



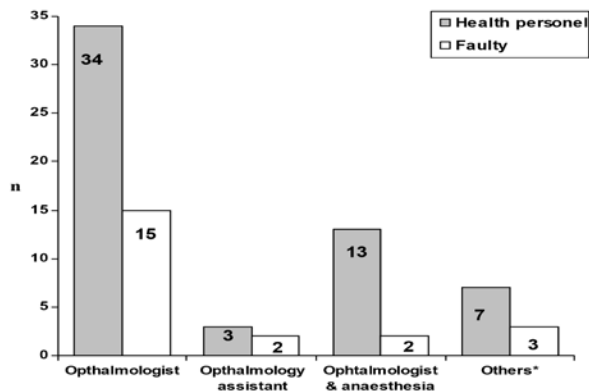
**Figure 3.** Distribution of Expert Opinion by the Health Centers and the State of Liability

Claims referred to the court	n	%	Claims found liable by expert opinion of the SHC (n)	
			n	%
Forgery of medical documenting and records (improper/erroneous reporting)	5	8.8	5	100%
Negligence of duty	6	10.5	6	100%
Bodily injury due to lack of care, attention, and insufficient experience	28	49.1	7	25%
Leading to death	7	12.3	2	28.5%
Unauthorized cornea transplantation	2	3.5	0	0.0%
Claim for damages (compensation)	9	15.8	2	22.2%
Total	57	100	22	

	Number of decisions (n)	Causes of liabilities
PREOP PERIOD	4 (19%)	Lack of monitoring before surgery Failure to take informed consent Selection of wrong drug treatment
PEROP PERIOD	5 (24%)	Lack of care and attention Selection of wrong drug treatment Unskillfulness in surgery Negligence of treatment
POSTOP PERIOD	2 (9%)	Deficient monitoring
OTHER	11 (48%)	No consultation to specialist Preparing erroneous/improper reports

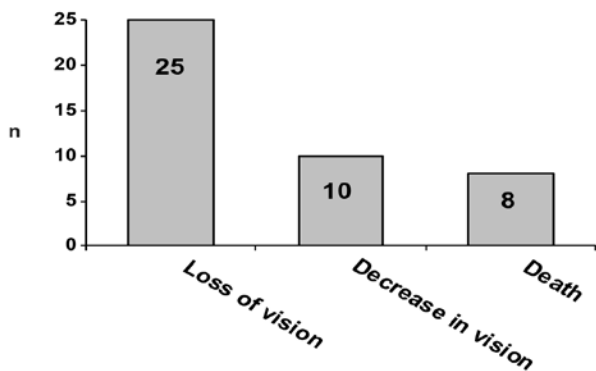
The SHC of Turkey decided the health professionals to be at fault in 22 claims (38.6%) but were not found liable in 35 claims (61.4%).

Near half of the surgical and medical interventions (14 of 48 cases) involved in malpractice claims were found at fault; however, most of the cases related to preparing reports were found faulty (8 of 9 cases). A significantly higher rate of health professionals were deemed to be at fault in preparing erroneous/

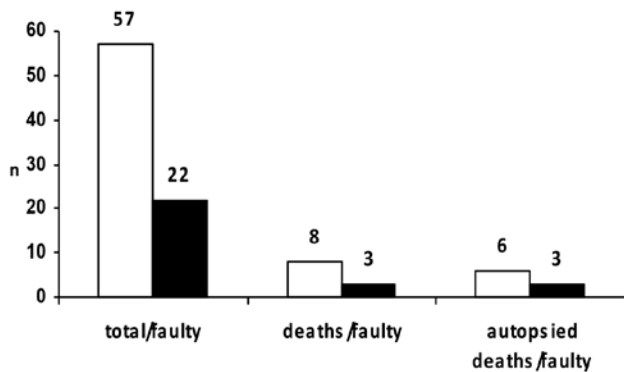


**Figure 4.** Distribution of health personnel that were found liable by SHC expert opinion

\*Others; pediatrician & ophthalmologist, general practitioner, hospital director



**Figure 5.** Outcomes of medical/surgical interventions



**Figure 6.** Distribution of files found liable by deaths and state of medicolegal autopsy

improper reports than in medical or surgical interventions. ( $\chi^2=12.032$ ;  $p=0.02$ ).

Distribution of outcomes of medical/surgical interventions is shown in Figure 5.

There was no significant difference in the outcomes of interventions between health centers (private clinics/hospitals or state hospitals).

Among 38 surgical procedures, 36 of them resulted in death or sequel, while among 10 medical procedures, 7 led to death or sequel. The outcome of intervention (death or sequel) did not differ significantly according to surgical or medical procedures. We investigated 22 health personnel found at fault: 10 events resulted in sequel and 3 events resulted in death, while the remaining 9 led to no sequel or death. Outcome of intervention (sequel or death) did not differ significantly whether the ophthalmologic health personnel found liable or not.

None of the cases in which regional anesthesia techniques was used resulted in death, while half of the cases that general anesthesia technique was used resulted in death ( $\chi^2=8.571$ ,  $p=0.03$ ). Among malpractice claims that were found faulty by the SHC, regional anesthesia or general anesthesia techniques did not differ significantly.

Medicolegal autopsy was performed on 6 of the cases which led to death among 8 cases (Figure 6).

Table 2 shows the distribution of causes of liabilities among ophthalmologists found by expert opinion of the SHC.

## Discussion

Ophthalmology and subspecialties carry potential risks for health workers against malpractice claims. Improvements in surgical procedures could increase these risks.<sup>4-6</sup>

Research on epidemiology and etiology of malpractice lawsuits has been gaining importance. The risk of an ophthalmologist taken a place in a medical condition involving malpractice claim (being reported for a malpractice claim) arises.<sup>6</sup> In addition, every 100 obstetricians/gynecologists had 0.62-0.91 lawsuit per year, while every 100 ophthalmologists had the lowest lawsuits per year.<sup>6-9</sup>

Among cataract surgery claims, technical mistakes, postoperative infections, inadequate consent, fault in selecting intraocular lens size/type were found as common causes for cataract treatment claims.<sup>2</sup> In the present study, claims related to intraocular lenses in cataract surgery process were found the most popular claim.

Paid indemnities for malpractice suits have dramatically increased in recent years.<sup>10</sup> Verdicts decided by judgment favored the doctor in most of the malpractice suits, however most of the claims resolved before judgment process in ophthalmology.<sup>3-5</sup> In a study, the compensation ratios and amounts were evaluated and it was observed that although cataract surgery was the leading cause for compensation claims, most of the glaucoma cases resulted in payment.<sup>1</sup> In the present study, cataract accounted for 5 out of a total of 9 compensation cases, consistent with the literature; however, we could not access the data about the paid

indemnities for malpractice claims. High risk of cataract surgery and high number of surgeries may have resulted in this outcome.

It was stated that many ophthalmology claims could be observed with diabetic claims.<sup>3</sup> We had only one case with cataract due to DM, in which optic atrophy occurred. Unlike from the literature, we could not discuss the DM-related cases because they might be classified under other clinical branches like internal medicine and were not included in this study.

The claim for cornea transplantation without any consent of the family was found as a correct intervention because of the legislation that permits cornea transplantation without consent of the deceased family. This finding provided us the importance of obeying legislations about organ transplantation.

The majority of incidents in our study occurred in state hospitals (56.1%), however, only 28.1% of clinicians in these hospitals were found to be liable. The large number of such claims in state hospitals could be associated with the fact that most of the ophthalmologists are working in state hospitals in our country, exceeding the number of those of private hospitals, clinics, and university hospitals.

Lack of care was mostly observed in state hospitals than in private ones (6 to 0 cases) and failure to obey the legal procedures was observed more frequently in private clinics or private hospitals than in state hospitals (7 to 2 cases). In our study, there was one case of wrong side eye evisceration, and no similar data was detected in the literature.

The leading cause of medical errors was reported to be misdiagnosis, recklessness, insufficient experience in Turkey.<sup>9-11</sup> Unlike from the literature, in the present study, failure to obey legal legislations and lack of care and attention (recklessness) in operative period was found as the main reasons of liabilities.

Every malpractice claim resulting in death must have gone to autopsy, however, our findings showed contrast data.<sup>12,13</sup> Autopsy was performed in 3 (37.5%) of the cases which resulted in death. Lack of medicolegal evaluation in these cases could lead to another malpractice claim.<sup>14-17</sup>

In Turkey, the regulations adopted in 2004 allow the plaintiffs and defendants to resolve their conflict themselves before judgment. This study revealed that all of the cases involving the claims of judgment related to forgery of documenting and negligence of duty were found liable by expert opinion and found guilty at the end of the juridical process.

Sharing/revealing data related to medical malpractice claims by health personnel could prevent faults at similar medical conditions.<sup>15-19</sup> For the purpose of solving problems around the

standard expert opinion evaluations, legislations of malpractice events should be put into practice and specified judgment system (expert courts) could be established.

## References

1. Nadeem A. A decade of clinical negligence in ophthalmology. *BMC Ophthalmology*. 2007;7:20.
2. Bettman JW. Seven hundred medicolegal cases in ophthalmology. *Ophthalmology*. 1990;97:1379-84.
3. Mavroforou A, Michalodimitrakis E. Physicians' liability in ophthalmology practice. *Acta Ophthalmol. Scand*. 2003;81:321-5.
4. Wasfy IA, Wasfy EI, Aly TA, Abd-Elsayed AA. Ophthalmic medicolegal cases in Upper Egypt. *Int Arch Med*. 2009;2:1.
5. Tomkins C. Over 120 years of defending ophthalmologists. *Br J Ophthalmol*. 2006;90:1084-5.
6. Menéndez-De-Lucas Ja, Luque-Mialdea F, Molina-Seoane V. Ophthalmology complaints in Spain. *Arch Soc Esp Oftalmol*. 2009;84:459-68.
7. Kraushar ME, Robb JH. Ophthalmic malpractice lawsuits with large monetary awards. *Arch Ophthalmol*. 1996;114:333-7.
8. Özdemir MH, Çekin N. The structure and the duties of the supreme council of health. *The Bulletin of Legal Medicine (in Turkish)*. 1998;1:94-7.
9. Ozdemir MH, Ergöner TA, Can IO. Medical malpractice claims involving children. *Forensic Sci Int*. 2009;191:80-5.
10. Studdert DM, Mello MM, Gawande AA, et al. Claims, errors and compensation payments in malpractice litigation. *N Engl J Med*. 2006;354:2024-33.
11. Özdemir MH, Çekin N, Can İÖ, Hilal A. Malpractice and system of expertise in anaesthetic procedures in Turkey. *Forensic Sci Int*. 2005;153:161-7.
12. Madea B. Medico-legal autopsies as a source of information to improve patient safety. *Leg Med (Tokyo)*. 2009;11 Suppl 1:S76-9.
13. Bove KE1, Iery C; Autopsy Committee, College of American Pathologists. The role of the autopsy in medical malpractice cases, II: controversy related to autopsy performance and reporting. *Arch Pathol Lab Med*. 2002;126:1032-5.
14. Featherstone T. Risk management, adverse events and litigation in vitreoretinal surgery. *Clin Risk*. 2007;13:7-11.
15. Kuehm SL, Doyle MJ. Medication errors: 1977 to 1988. Experience in medical malpractice claims. *N J Med*. 1990;87:27-34.
16. Bhan A, Dave D, Vernon SA, Bhan K, Bhargava J, Goodwin H; Medical Defence Union; Medical Protection Society; Medical and Dental Defence Union of Scotland. Risk management strategies following analysis of cataract negligence claims. *Eye (Lond)*. 2005;19:264-8.
17. Ali MN, Fraser SG. Medicolegal aspects of glaucoma. *Clin Risk*. 2007;13:12-6.
18. Demircan A, Yükseloğlu H, Erkan I, Gül E, Altan T, Elmas İ. Göz hekimlerinin kornea nakli sürecinde karşılaştıkları tıbbi, hukuki ve etik sorunlara yaklaşımlarının değerlendirilmesi. *Türkiye Klinikleri J Med Sci*. 2012;32:382-8.
19. Özdemir MH, Saraçoğlu A, Özdemir AU, Ergöner AT. Dental malpractice cases in Turkey during 1991-2000. *J Clin Forensic Med*. 2005;12:137-42.