e-ISSN: 0975-1556, p-ISSN:2820-2643

Available online on www.ijpcr.com

International Journal of Pharmaceutical and Clinical Research 2023; 15(8); 1236-1240

Original Research Article

Retrospective Study of Medicolegal Aspects of Trauma Cases in Orthopaedics

Showket Rashid[1], OBAID Nisar[2], Jabreel Muzaffar[3], Khalid Quyoom[4]

[1]Assistant Professor, Department of Forensic Medicine, Government Medical College Handwara, Jammu & Kashmir

[2]Assistant Professor, Department of Orthopaedics, Government Medical College Handwara, Jammu & Kashmir

[3]Senior Resident, Department of Physical Medicine and Rehabilitation, Sher-I-Kashmir Institute of Medical Sciences, Srinagar, Jammu & Kashmir

[4]Junior Resident, Department of Forensic Medicine, Government Medical College Handwara, Jammu & Kashmir

Received: 30-5-2023 / Revised: 30-06-2023 / Accepted: 30-07-2023

Corresponding author: Dr. Jabreel Muzaffar

Conflict of interest: Nil

Abstract:

Background and Aim: Victim of injuries presenting to a hospital is a medico-legal issue. With the tremendous metamorphosis in the healthcare sector, incidents of lawsuits against orthopaedic surgeons and hospitals, in the name of medical negligence is on the rise. Unfortunately, regardless of the complexity of the injury, the expectations from the patients as per the outcome of the treatment are also high. Present study aimed to investigate the cases of medical complaints in orthopaedic patients who had been involved in a traumatic accident.

Material and Methods: In this descriptive-analytical study, all litigations were studied. Present study was done at Govt. Medical College Baramulla from May 2020 to April 2021. During the next step, the trauma orthopedic claims were included for more detailed reviews. Demographic data including gender, age, occupation, delineation of geographic areas, comorbidities, history of previous psychiatric disease, and cause of injury were collected.

Results: The most common injuries were at the hand, thigh, elbow, and forearm, respectively. Likewise, the most common alleged complication was malunion or non-union, and the least was attributed to neurological insufficiencies and surgical site infection, respectively. According to the forensic reviews, in 40% of the cases, the main problem that led to the complaint was the inappropriate or insufficient explanation to the patient. In 60%, there was a problem with the surgery ($P \leq 0.05$).

Conclusion: In orthopaedics, if medico-legal cases are considered as a disease, poor results are its chief symptom. Today's patients insist that medical products and services should be provided without risk. To avoid malpractice lawsuits careful clinical appraisal, good clinical judgment, impeccable surgical technique, good surgeon-patient relationship, and well documented records are essential.

Keywords: Litigations, Malunion, Medico-Legal Cases, Orthopedics.

Introduction

Clinical malpractice has enormous financial consequences for healthcare systems around the world, as well as a significant impact on patients and families. [1] Malpractice is described as professional responsibility resulting from insufficient medical care due to a lack of competence, neglect, or deception.

Furthermore, medical liability is defined as the duty to rectify or settle the consequences of medical intervention from a penal, civil, or administrative perspective. [2]

The medical fraternity in India experienced the first assault by the honorable Supreme Courtorder in 1995, where medical services were included under the Consumer Protection Act. Since then, there has been a slow but steady rise in the number of such cases.

In the last decade, the number has grown rather exponentially. [3,4] Thankfully, we had some respite from the following two judgments of the Supreme Court:

- The one from 2005 that says, criminal negligence case cannot be slapped on doctors unless in extreme cases of negligence.
- The more recent judgment from 2009 recommends that all cases pertaining to medical negligence should be referred to a medical board/specialist for expert opinion.

Despite the relief from the Supreme Court, most orthopedic practitioners who have been affected by the medico-legal issues directly or indirectly, dread them. However, there is stilla significant faction of orthopedic surgeons in this country who are still unaware of legal implications of their practice. [5]

As if it were not enough, complications are more likely in the management of orthopedic cases. While globally, orthopedics lists among the top 5 fields which are most often sued, in India, it is currently occupying the No. 2 slot in terms of the number of medico-legal cases pending at all levels of Consumer Forums. Unfortunately, in terms of numbers and compensation amount too, orthopedics ranks high.

Trauma and orthopedic surgery have generally been viewed as a highly litigious specialty because of the volume of operations performed and the accompanying concerns if errors or complications happen [3,4]. Orthopedics is ranked as the third most dangerous medical specialty by medical indemnity insurers, after obstetrics and neurosurgery. [6]

The most probable reasons for orthopedics to be on the top of the list in terms of medico-legal cases are: Doctor-Patient rapport not built before the treatment: Most orthopedic cases that lead to medico-legal cases result from trauma. Besides, these cases are seen in the Emergency Room, thereby resulting in critical and uncertain decisions. Unlike in other fields where the patient has an existing relationship before any complications occur, the rapport-building has to begin much after the treatment has begun. [7,8]

Unlike other medical divisions, the complications are more visible in the form of deformities. Surgery results usually lead to prolonged morbidity than mortality. Though in the court of law, it is imperative for the opponent to prove the doctor's negligence, the presiding officer of the forum usually relies upon what is visible to the eye. Besides, the opponent will have a 'standing witness' in the form of a patient who walks to the forum with walking aids, wheelchairs, and in some cases, obvious deformity and discharging sinuses. Added to these are our 'transparent media' in the form of X-rays, which speak to the underlying conditions. In most of the cases, a complication of the injury/disease is viewed as the negligence on the part of the doctor or the hospital. [9]

Poor result in the form of non-unions, mal-unions, limb length discrepancies, loss of movement and residual deformities are some of the most common cases that are drawn into a legal battle. Unfortunately, regardless of the complexity of the injury, the expectations from the patients as per the outcome of the treatment are also high. Present study aimed to investigate the cases of medical complaints in orthopedic patients who had been involved in a traumatic accident.

Material and Methods

In this descriptive-analytical study, all litigations were studied. Present study was done at Govt. Medical College Baramulla from May 2020 to April 2021. During the next step, the trauma orthopedic claims were included for more detailed reviews. Ethical approval was taken from the institutional ethical committee and written informed consent was taken from all the participants.

We formally requested information about the involved orthopaedist(s) and patient(s) as well as details about the alleged malpractice event. In terms of the event's characteristics, the type of hospital where it occurred, the afflicted anatomical location, the clinical outcome of the case, and the final forensic decision on the claim (confirmed malpractice vs rejected malpractice). Demographic data including gender, age, occupation, delineation of geographic areas, comorbidities, history of previous psychiatric disease, and cause of injury were collected.

Statistical analysis

The recorded data was compiled and entered in a spread sheet computer program (Microsoft Excel 2007) and then exported to data editor page of SPSS version 15 (SPSS Inc., Chicago, Illinois, USA). For all tests, confidence level and level of significance were set at 95% and 5% respectively.

Results

Among the 212 Legal claims during the 2 years mentioned above, 105 were related to orthopedic issues. After reviewing the files one by one, a total of 100 claims referred to trauma-related conditions, fulfilled our inclusion criteria, and were enrolled in the study.

The mean age of the applicant was 32.54 years. Forty eight litigations were during the first half of the study period, while 52 were in the next, and no significant difference was found ($P > 0.05$). The average time between the operation and the claim registration was 10.22 month. Furthermore, there were an average of 09.85 month between the initial litigation and the final forensic decision. Table 1 demonstrates the demographic features of the patients in our study. The most common injuries

were at the hand, thigh, elbow, and forearm, respectively. Based on our investigation, most of the alleged defendants' error is believed to be that the wrong treatment was chosen for patients. Likewise, the most common alleged complication was malunion or non-union, and the least was attributed to neurological insufficiencies and surgical site infection, respectively. During further investigations, we found that the most common chief complaint was attributed to post-operation complications, prolonged treatment period, malrotation, reoperation need, and persistent pain. According to the forensic reviews, in 40% of the cases, the main problem that led to the complaint was the inappropriate or insufficient explanation to the patient. In 60%, there was a problem with the surgery ($P \leq 0.05$).

Table 1: General Characteristics of the patients

Variable	Number	Percentage (%)
Gender		
Male	69	69
Female	31	31
Residence		
Urban	45	45
rural	55	55
Comorbidities		
Yes	29	29
No	**71**	71
History of psychiatric disease		
Yes	9	9
No	91	91
Cause of injury		
Road Traffic Accident	74	74
Falling down	4	4
Occupational injury	14	14
Injury at home	8	8

Discussion

Poor result in the form of non-unions, mal-unions, limb length discrepancies, loss of movement and residual deformities are some of the most common cases that are drawn into a legal battle. Unfortunately, regardless of the complexity of the injury, the expectations from the patients as per the outcome of the treatment are also high. Though infection was considered to be beyond surgeons' control earlier, more and more fingers are being pointed towards the operating conditions/set-up.

Our results indicate that the primary factor for patients to take action against orthopedic surgeons is the lack of sufficient explanation. Our results also indicated that the most alleged defendants' errors are a lack of proper decision-making. Based on our analysis, hand injuries [10] were the most common anatomic location of the complaint, with finger malalignment/rotation being the most frequently reported chief complaint. As with any other fields, good communication and establishing a friendly relationship with the patient is of paramount importance.

The patient should be explained thoroughly about the nature of the injury, treatment options, and possible complications that are serious and frequent. Every step taken from the time of examination till the patient is last seen has to be documented properly. The consent of the patient should be taken prior to each procedure/surgeries individually. All the documentation should be objective avoiding subjective documentation. Most importantly, be sure to make all your documentation legible.

In our study, non-unions, malunions, limb length discrepancies, loss of movement, and residual deformities are the most common cases that are made legal statements against. Fear of litigation causes changes in clinical practice and encourages the abuse of healthcare resources.

According to published studies, this can lead to physicians ordering further lab data workup and radiography as a defense strategy against court suits. [11,12] Orthopedic surgeons' defensive medicine is a significant factor in health care costs with marginal benefit to patients. [13] Understanding the factors that influence litigation outcomes and the factors that generate litigation can help physicians take preventative measures to decrease future litigation risks. Cichos et al [14] conducted a study on national orthopedic settlement and verdict reports between 1988 and 2013.

The results indicated a 215% growth in litigation frequency and also a 280% upturn in the settlement. Erivan et al [15] has also reported a rise

in post-arthroplasty complaints between 2006 and 2016 from 0.2% up to 1.2%. On the contrary; a handful of studies indicate decreasing numbers of litigation. Fear of litigation causes changes in clinical practice and encourages the abuse of healthcare resources.

According to published studies, this can lead to physicians ordering further lab data workup and radiography as a defense strategy against court suits. [11,12] Orthopedic surgeons' defensive medicine is a significant factor in health care costs with marginal benefit to patients.

Our results indicated that hand complications were the highest, this is closely related to the negative impact it has on the patient's occupational, social, and mental status. Mouton et al [16] reported a study led between 2007 and 2010 that most of the claims, the patient had on eighty claims of hand wounds, major cutbacks on occupational and social activities. In a survey by Atrey et al [17], which reviewed 1473 trauma and elective cases of all orthopedic anatomical sites, the most common cause of chief complaint was hip.

Our results indicated the most common problem leading to litigation was inappropriate or insufficient explanations in 47% of the cases. One of the most critical discussions with trauma patients is how to provide knowledge during this brief moment of trauma time to treatment, think about it, and make judgments based on that education. Performing a process that may be done optimally, effectively, and without regular execution of informed consent helps a lot in this case, [18] as we discovered that slightly less than half of the complaints were due to a lack of appropriate explanation. Listening, accepting responsibility, apologizing, and doing all we can to make things right with the patient dramatically minimizes the chance of a malpractice lawsuit. [10] It has been proven by Atrey et al [17] that improved communication skills, empathy, monitoring, and patient education can significantly reduce the number of litigations. Just like in any other field, educating patients and building trust with them is critical.

The most common chief complaint leading to filed complaints was attributed to post-operation complications. The reported rate for complications in trauma surgery is 21.1%, with the incidence of error being 8.7%. [19] Stewart et al [20] has reported no significant difference while dealing with trauma patients compared with other surgical patients and stated the overall actual risk of a malpractice lawsuit to be low. But, when dealing with trauma patients, it is critical to plan ahead of time to avoid therapeutic mistakes, which have been the most common problem.

Moreover, achieving the ideal condition and providing the necessary infrastructure is necessary. Hospital infrastructure, surgical equipment, operating rooms, and orthopedic surgeons all play a role in determining the outcome of a patient's surgery. [21] If complications occur during the course of treatment be sympathetic with the patient. Explain the complication and the corrective plan required to handle the complication. When in doubt, consult your seniors or colleagues about the management of complication. Do not hesitate to refer the case to the concerned expert when required.

Conclusion

In orthopedics, if medico-legal cases are considered as a disease, poor results are its chief symptom. Today's patients insist that medical products and services should be provided without risk. There is an increasing attitude of the courts that medicine has become an exact science and failures are not acceptable. To avoid malpractice lawsuits careful clinical appraisal, good clinical judgment, impeccable surgical technique, good surgeon-patient relationship, and well documented records are essential. Surgical treatment of hand injuries and surgery in non-educational hospitals received the most complaints from patients in our study. Most litigation outcomes were caused by a physician's failure to fully explain and educate the traumatic orthopedic patients and a technological error.

References

1. Atrey A, Gupte CM, Corbett SA. Review of successful litigation against english health trusts in the treatment of adults with orthopaedic pathology: clinical governance lessons learned. J Bone Joint Surg Am. 2010; 92: e36
2. Aguirre-Gas HG, Zavala-Villavicencio JA, Hernández-Torres F, Fajardo-Dolci G. Quality of medical care and patient surgical safety: medical error, malpractice and professional liability. Cir Cir. 2010; 78: 456-462.
3. Orthopaedic Malpractice:an attorney's prospective; Klimo GF1, Daum WJ, Brinker MR, McGuire E, Elliott MN. Am J Orthop (Belle Mead NJ). 2000 Feb; 29 (2): 93-7.
4. Managing Orthopaedic Malpractice risk, 2nd edition AAOS. February. 2001 bulletin.
5. Medical errors in Orthopaedics, David A, wong, James H. Heerndon, S. Terry Canale The Journal of Bone and Joint Surgery (American). 2009; 91: 547-557.
6. Coyte PC, Dewees DN, Trebilcock MJ. Medical malpractice--the Canadian experience. N Engl J Med. 1991; 324: 89-93.

7. Travers V. Burnout in orthopedic surgeons. Orthop Traumatol Surg Res. 2020; 106: S7-S12.
8. Ahmed SA, DeFroda SF, Naqvi SJ, Eltorai AEM, Hartnett D, Ruddell JH, Born CT, Daniels AH. Malpractice Litigation Following Traumatic Fracture. J Bone Joint Surg Am. 2019; 101: e27.
9. Bajracharya A, Agrawal A, Yam B, Agrawal C, Lewis O. Spectrum of surgical trauma and associated head injuries at a university hospital in eastern Nepal. J Neurosci Rural Pract. 2010 Jan; 1(1):2-8.
10. Majeed H. Litigations in trauma and orthopaedic surgery: analysis and outcomes of medicolegal claims during the last 10 years in the United Kingdom National Health Service. EFORT Open Rev. 2021; 6: 152-159.
11. Traina F. Medical malpractice: the experience in Italy. Clin Orthop Relat Res. 2009; 467: 434-442.
12. Kessler D, McClellan M. Malpractice Law and Health Care Reform: Optimal Liability Policy in an Era of Managed Care. J of Pub Econo. 2002; 84: 175-97.
13. Sethi MK, Obremskey WT, Natividad H, Mir HR, Jahangir AA. Incidence and costs of defensive medicine among orthopedic surgeons in the United States: a national survey study. Am J Orthop (Belle Mead NJ). 2012; 41: 69-73.
14. Cichos KH, Ewing MA, Sheppard ED, Fuchs C, McGwin G Jr, McMurtrie JT, Watson SL, Xu S, Fryberger C, Baker DK, Crabtree RM, Murphy AB, Vaughan LO, Perez JL, Sherrod BA, Edmonds BW, Ponce BA. Trends and Risk Factors in Orthopedic Lawsuits: Analysis of a National Legal Database. Orthopedics. 2019; 42: e260-e267
15. Erivan R, Chaput T, Villatte G, Ollivier M, Descamps S, Boisgard S. Ten-year epidemiological study in an orthopaedic and trauma surgery centre: Are there risks involved in increasing scheduled arthroplasty volume without increasing resources? Orthop Traumatol Surg Res. 2018; 104: 1283-1289.
16. Mouton J, Houdre H, Beccari R, Tarissi N, Autran M, Auquit-Auckbur I. Surgical exploration of hand wounds in the emergency room: Preliminary study of 80 personal injury claims. Orthop Traumatol Surg Res. 2016; 102: 1009-1012.
17. Atrey A, Gupte CM, Corbett SA. Review of successful litigation against english health trusts in the treatment of adults with orthopaedic pathology: clinical governance lessons learned. J Bone Joint Surg Am. 2010; 92: e36.
18. Bhutta MA, Arshad MS, Hassan S, Henderson JJ. Trends in joint arthroplasty litigation over five years: the British experience. Ann R Coll Surg Engl. 2011; 93: 460-464.
19. Bosma E, Veen EJ, Roukema JA. Incidence, nature and impact of error in surgery. Br J Surg. 2011; 98: 1654-1659.
20. Stewart RM, Johnston J, Geoghegan K, Anthony T, Myers JG, Dent DL, Corneille MG, Danielson DS, Root HD, Pruitt BA Jr, Cohn SM. Trauma surgery malpractice risk: perception versus reality. Ann Surg. 2005; 241: 969-75.
21. Gathen M, Jaenisch M, Fuchs F, Weinhold L, Schmid M, Koob S, Wirtz DC, Wimmer MD. Litigations in orthopedics and trauma surgery: reasons, dynamics, and profiles. Arch Orthop Trauma Surg. 2022; 142: 3659-3665.