Litigation and Malpractice in Carpal Tunnel Surgery: An Analysis of 60 Successful Claims Over a 10-Year Period (2002–2012)

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Abstract

Introduction Carpal tunnel surgery represents a significant source of litigation in hand surgery. The aim of this work was to evaluate the burden of successful litigation relating to this type of hand surgery in England. Secondary measures looked at identifying the most common causes of successful legal action.

Material and Methods A retrospective review was conducted on the National Health Service Litigation Authority (NHSLA) database. All successful carpal tunnel surgery-related claims over a 10-year period from 2002 to 2012 were identified. A total of 60 claims were retrieved and analyzed.

Results The total cost of successful claims to the NHS was £3.9 million. This comprised £2.4 million in damages, with £1.5 million in legal costs (22% in NHS legal costs, the remainder the claimants costs). The mean cost of settling a claim was £65,440 (range £350–£397,134). The commonest cause of the claim was nerve damage. The average damages paid in relation to this injury was £55,460. Additional surgery and poor outcome were the next commonest cause of successful proceedings, with average damages of £28,984.

Conclusion Legal action in relation to carpal tunnel surgery is a considerable source of cost to hand surgeons and the NHS. The complexity of resolving these cases is reflected in the associated legal costs, which represent a significant proportion of payouts. With improved understanding of factors instigating successful legal proceedings physicians can recognize areas, where practice and training can be improved, and steps can be taken to minimize injury.

Keywords

- carpal tunnel
- malpractice
- litigation
- hand surgery

Introduction

Since 1995 the United Kingdom has had a centralized claims management organization in the form of the National Health Service Litigation Authority (NHSLA).¹ This company has the role of dealing with and managing claims that are brought against the NHS for litigation. Previous work has shown malpractice litigation is on a general increasing trend in relation to hand surgery.^{2,3}

Carpal tunnel syndrome is the most common compressive neuropathy to involve the upper extremity, and its surgical release is the most frequently done procedure on the hand.^{4–6} Previous work has demonstrated that carpal tunnel surgery is a common cause for litigation.² Learning from the cases that have been brought against the NHS in relation to carpal tunnel surgery is an important part of clinical governance and can help improve patient safety. It can also help surgeons to identify strategies to reduce litigation and improve the

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counselling of patients when consenting them for this procedure. In addition to explaining the error and treating the injury, surgeons have a moral obligation to learn how to prevent similar errors from occurring in the future.⁷

The aim of this work was to evaluate the burden of successful litigation relating to (orthopedic) carpal tunnel surgery in England. Secondary measures looked at identifying the common causes of successful legal action and the associated payouts.

Methods

A request was made under the freedom of information act 2000 to the NHSLA to identify all successfully closed upper limb-related orthopedic cases between the financial years 2002 and 2012. The data received contained information on the year of the alleged incident, a brief description of the incident details, and year the claim was filed. Furthermore, the information from the NHSLA also contained information on the cause and type of injury leading to the claim based on NHSLA classifications. The data also provided information with regards to the costs incurred and damages paid. These cases were then reviewed by the authors and cases related to carpal tunnel surgery specifically identified. These cases were then analyzed to ascertain the total burden of these types of claims to the NHS in the period studied. We then looked at the breakdown of costs. The nature of the injury leading to successful claims was also reviewed and categorized under the NHSLA reporting scheme. The figures stated in these cases should be consulted only as an illustration of the cost to the NHS and are not a guide to the standard settlement repayment.

Results

The freedom of information request we made identified a total number of 699 cases from the NHSLA. Out of these, 60 were specifically related to carpal tunnel surgery. The total cost of settling these claims was £3.9 million over the period that we looked at. A breakdown of the overall costs of these claims is highlighted in ►Table 1. The average overall cost to the NHS in settling these claims was £65,440. The range of payouts was from £350 to £397,134. A breakdown of the average costs and the associated ranges is highlighted in ►Table 2.

The types of injuries that led to successful claim are highlighted in ►Fig. 1. The leading cause of claim was nerve injury which occurred in just over half of the cases reviewed. The next most

Table 2 Breakdown of the average cost of settling these claims and the associated range of payments

Parameter	Average value	Range minimum	Range maximum
Total damages	40,540	350	230,000
Defense cost	5,540	0	39,798
Claimant cost	19,360	0	136,000
Total cost	65,440	350	397,134

common was when patients' needed additional/unnecessary procedures. This umbrella term often encompassed, incomplete decompression, wrong site surgery, and delay in treatment. A breakdown of the types of injuries leading to successful claim is highlighted in ►Fig. 1.

The average payouts in relation to these injuries are highlighted in ►Fig. 2.

The average total payout for patients that had suffered some form of nerve injury was £83,099. The figures for the payouts in relation to tendon injuries are skewed, as the one case where tendon damage occurred, resulted in an extremely high payout of above £190,000.

Discussion

Carpal tunnel syndrome is the most common upper limb condition presenting to hand clinics,⁴⁻⁶ but the number of patients making a compensation claims related to carpal tunnel decompression in the United Kingdom was previously unknown.^{2,8} The results of this work demonstrate there is a considerable amount of cost associated with a relatively simple procedure. The amount of money that is paid out in reimbursement for these claims could be used to fund other areas of clinical need. To our knowledge, this is the largest review of litigation secondary to carpal tunnel surgery in the NHS.

The commonest cause of a successful claim in this study was nerve injury. Although the specific nerve that was damaged was not specifically recorded by the NHSLA we can appreciate that nerve damage in any form will lead to considerable amounts in payout. The information received from the NHSLA did not differentiate the cases that were performed via open or endoscopic techniques. However, previous work has shown the rate of irreversible nerve damage as a result of endoscopic carpal tunnel release was comparable with open carpal tunnel release.^{9,10} Furthermore, the risk of tendon injury, vascular injury as well as wound complications, and reflex sympathetic dystrophy were equivalent between endoscopic carpal tunnel release and open carpal tunnel release.⁹ In this review, there was an outlier in terms of tendon damage in this work where a relatively high payout was given in this case despite the injury only occurring once.

Serious complications can occur during both open carpal tunnel release and endoscopic release.^{4-6,10,11} Most hand surgeons would agree that endoscopic release is a more technically demanding procedure and should not be attempted by surgeons that are not already experienced in

Table 1 Breakdown of total costs

Claim breakdown	Value (in £)
Total costs of claim	3,926,388
Total costs of damages	2,432,615
Total claimant costs	1,161,523
Total costs of defense	332,250

Fig. 1 Types of injury leading to a successful claim.

open techniques.⁹ A thorough understanding and respect for the surrounding anatomy is crucial to endoscopic carpal tunnel release. In addition, it is recommended that surgeons undergo training on cadaver models before performing endoscopic release on the patients. Focused training on routine procedures may also help to reduce the incidence of a successful claim.

Being aware of the causes in successful litigation can allow for the development of strategies to reduce further occurrence. Previous work by Pappas et al, has highlighted strategies and advice on how to mitigate the risk of litigation in relation to hand surgery. These strategies include emphasis on being honest with patients and keeping them well informed with regards to adverse events that may happen during surgery, no matter how unlikely it is to occur.¹² These discussions' must also be documented meticulously and precisely. Previous work has shown that patients are inclined to litigate if they have an outcome that was not properly explained to them in the consent process.¹² The value of developing a strong relationship between patients and their families is, also extremely important, particularly in the elective surgery setting.¹²

This study does have limitations. The NHSLA database is primarily a claims management database and therefore any

errors in coding could impact on the results we received from the NHSLA. The freedom of information act also limits information with regards to surgeon and patient identifiable characteristics, therefore, limited information was available with regards to case details and the grade of surgeon performing the surgery and the method that was used to carry out the procedure. Another limitation of this work is that we only asked for data from the NHSLA with regards to cases performed solely by orthopedic surgeons. We did not look at claims that were brought forward in relation to carpal tunnel surgeries that were performed by plastic and neurosurgical specialties. As a result of this, we cannot exactly determine the total number of carpal tunnel cases that were performed and the proportion of these that led to the claims highlighted in this work. This study tried to elucidate the common causes for successful litigation, as a result of the nature of the data we obtained from the NHSLA, preventative strategies are difficult to propose as the reason for successful claims could be multifactorial and vary between institutions.

Although orthopedic surgeons cannot control the legal climate in the country in which they practice, they can protect themselves by practicing good and safe medicine, particularly in the treatment of common problems such as carpal tunnel syndrome which seems to generate the most

Fig. 2 Breakdown of costs stratified against the type of injury.

litigation. Knowing and abiding by good standards of care, keeping patients informed, and developing good relationships is crucial to mitigating legal risk. This combined with a sound knowledge of the types of claims that have led to successful claims can help improve patient safety and lead to the development of strategies to reduce subsequent litigation.¹²

References

- 1 NHSLA. Factsheet 1: Basic Information. London, United Kingdom. NHSLA (NHS Litigation Authority); 2014. Available at <http://www.nhs.uk/currentactivity/Documents/NHS%20LA%20Factsheet%201%20-%20basic%20information%202014>. Accessed on April 26, 2016
- 2 Khan IH, Giddins G. Analysis of NHSLA claims in hand and wrist surgery. *J Hand Surg Eur Vol* 2010;35(1):61–64
- 3 Khan IH, Jamil W, Lynn SM, Khan OH, Markland K, Giddins G. Analysis of NHSLA claims in orthopedic surgery. *Orthopedics* 2012;35(5):e726–e731
- 4 Agee JM, McCarroll HR Jr, Tortosa RD, Berry DA, Szabo RM, Peimer CA. Endoscopic release of the carpal tunnel: a randomized prospective multicenter study. *J Hand Surg Am* 1992;17(6):987–995
- 5 Agee JM, McCarroll HR, North ER. Endoscopic carpal tunnel release using the single proximal incision technique. *Hand Clin* 1994;10(4):647–659
- 6 Agee JM, Peimer CA, Pyrek JD, Walsh WE. Endoscopic carpal tunnel release: a prospective study of complications and surgical experience. *J Hand Surg Am* 1995;20(2):165–171, discussion 172
- 7 Johnson SP, Adkinson JM, Chung KC. Addressing medical errors in hand surgery. *J Hand Surg Am* 2014;39(9):1877–1882
- 8 Storey PA, Akhtar S, Bradley MJ, Kay NR, Lindau T, Burke FD. Compensation claims and carpal tunnel decompression. *Ann R Coll Surg Engl* 2008;90(8):714–715
- 9 McDonald AP III, Lourie GM. Complex surgical conditions of the hand: avoiding the pitfalls. *Clin Orthop Relat Res* 2005;(433):65–71
- 10 Boeckstyns ME, Sørensen AI. Does endoscopic carpal tunnel release have a higher rate of complications than open carpal tunnel release? An analysis of published series. *J Hand Surg [Br]* 1999;24(1):9–15
- 11 Jebson PJ, Agee JM. Carpal tunnel syndrome: unusual contraindications to endoscopic release. *Arthroscopy* 1996;12(6):749–751
- 12 Pappas ND, Moat D, Lee DH. Medical malpractice in hand surgery. *J Hand Surg Am* 2014;39(1):168–170