# Follow Up After Carpal Tunnel Decompression: The Patients Perspective

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### Abstract

Carpal tunnel decompression is a commonly performed operation however no consensus exists regarding the follow-up of patients post-operatively. We performed a questionnaire study assessing patients' perspectives of follow-up after carpal tunnel surgery. Overall 75.9% of patients felt hospital follow-up helpful, 73.5% felt it necessary and 61.4% perceived they had problems in the post-operative period. We recommend hospital follow-up after carpal tunnel decompression to increase patient satisfaction and allow post-operative problems to be addressed by the surgical team.

# INTRODUCTION

Open carpal tunnel decompression is well established in the treatment of carpal tunnel syndrome. At present there is no consensus as to the most appropriate method of follow up for patients post-operatively. Practice varies from single or multiple attendances at hospital following operation to review in a primary care setting. The only previous study to address the issue compared suture removal at two weeks post-operatively either in hospital or in a primary care setting. They found that significantly more patients were diagnosed with wound infections in the group followed up in primary care and postulated that this could lead to the unnecessary administration of antibiotics. [1]

Hospital follow-up can involve long journeys for patients followed by prolonged delays in busy orthopaedic clinics. For those patients followed up as a hospital outpatient the mandatory tariff for an orthopaedic follow up appointment is currently £73. Given the frequency of carpal tunnel decompression this represents a significant cost to primary care trusts.

We hypothesised that hospital follow after carpal tunnel decompression has no additional benefit over follow up in a primary care setting and that patients would find hospital follow up neither useful nor necessary.

# METHODS

We performed a retrospective questionnaire study of patients undergoing carpal tunnel decompression in our hospital. Ethical committee approval was obtained at the outset. We identified 151 patients who underwent carpal

tunnel decompression under the care of the senior author between April 2004 and January 2007. These patients had been reviewed both in hospital and in primary care postoperatively. All patients were posted an anonymous questionnaire. Patients were asked whether they agreed, disagreed or were unsure that a review in a hospital clinic post-operatively was useful. They were also asked whether they agreed, disagreed or were unsure that a hospital appointment was necessary. Lastly they were asked of any complications following surgery, namely pain, infection numbness or recurrence of symptoms.

Patient response to the postal questionnaire was poor among patients who had not received hospital follow up therefore these patients were contacted by telephone and the same questionnaire followed.

# RESULTS

Of the 151 identified patients 98 had received hospital follow up after their operation. We received completed questionnaires from 53 of these patients (54.1%). The mean number of follow up appointments was 1.6 (range 1 to 3). Results are summarised in tables one and two.

# Figure 1

Table 1

# Percentage of patients who felt hospital follow-up necessary Yes



### Figure 2

Table 2



Percentage of patients who felt hospital follow-up

At the first attendance 40/53 (75.5%) patients felt the appointment was helpful with 12/53 (22.6%) unsure and only 1/53 (1.9%) patient feeling the appointment was not helpful. Thirty-eight patients (71.7%) felt the appointment was necessary. At the first follow up 36/53 patients (67.9%)perceived that they had post-operative problems. Ten reported ongoing pre-operative symptoms, 16 pain, 9 numbness and 4 infection.

Twenty-one patients received a second follow up. Of these 15/21 (71.4%) reported the appointment helpful and the same number felt it was necessary. At the second

appointment 10/21 (47.6%) felt they still had problems. Five still had pain, three numbness and in three pre-operative symptoms persisted.

Ten patients received a third post-operative hospital appointment. 6/10 felt it helpful and necessary. By this stage 4/10 perceived problems, two had ongoing numbness, two pain and one persistent symptoms.

From the group of 53 patients with no hospital follow up we completed telephone questionnaires in 30 cases. Twentythree of these patients (76.7%) felt that a hospital appointment following surgery was necessary and would have been helpful. Within this group 15/30 reported problems post-operatively. Six had problems with ongoing symptoms, 2 with infection, 6 with pain and one with numbness.

Overall we completed questionnaires from 83 of the 151 identified patients (55.0%). Examining both the patients who received hospital follow-up and those who did not together 63/83 (75.9%) felt that a hospital appointment following surgery was helpful and 61/83 (73.5%) felt it necessary. Fifty-one of these 83 patients (61.4%) perceived they had problems post-operatively.

# DISCUSSION

We hypothesised that patients would find follow up in hospital neither necessary nor helpful. Our results do not support this. Of the patients who underwent hospital follow up and responded to our questionnaire 40/53 (75.5%) felt the first appointment helpful and 38/53 (71.7%) perceived it as necessary. Overall 63/83 (75.9%) thought that a hospital appointment after surgery would be helpful and 61/83 (73.5%) thought an appointment would be necessary. Interestingly 51/83 (61.4%) of patients perceived they had a problem post-operatively.

The response rate to our questionnaire was disappointing (83/151,54.5%), The results of those who did respond strongly favour initial follow up after carpal tunnel syndrome in a hospital rather than a primary care setting and we suggest this is a true reflection of patients beliefs.

Carpal tunnel syndrome has a reported incidence between 99 and 329 per 100,000 per year. [23]. Open carpal tunnel decompression has been shown to provide good relief of symptoms in the majority of patients. [4]. The only previous study to address post-operative follow-up compared suture removal at two weeks either in hospital or in a primary care

setting finding significantly more patients were diagnosed with wound infections in the group followed up in primary care. [1] We could find no other study addressing patients attitudes to post-operative follow-up.

As regards the perception of post-operative problems our results are in keeping with the findings of Lindau and Karlsson who noted complaints in almost one third of patients studied six years following carpal tunnel decompression although only 5 (5.4%) were considered complications and 9 (9.8%) recurrences. [ $_5$ ]

In view of the fact that most patients felt hospital follow up to be helpful and necessary and also that many perceived they had post-operative problems we recommend that initial follow up after carpal tunnel decompression should occur in a hospital setting. This would increase patient satisfaction, allow any post-operative complications to be dealt with without the need for further referral and enable the surgeon to counsel regarding perceived post-operative problems. A prospective randomised comparison of hospital and primary care follow-up would strengthen the evidence.

### References

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