

UNIVERSITY OF
Southampton

Arthritis
Research UK

MRC | Medical
Research
Council

centre for
musculoskeletal
health & work

University Hospital Southampton **NHS**
NHS Foundation Trust

NHS
*National Institute for
Health Research*



Return to Employment After Carpal Tunnel Surgery

Carpal tunnel syndrome

Most common peripheral nerve entrapment

Symptoms

- sensory
- motor

UK incidence

- 140 / 100,000¹
- increasing²



Carpal tunnel release surgery

- More than 51,000 CTR procedures in the NHS (England) each year¹
- No evidence-based guidance on when patients should return to work post-operatively...
- Or whether earlier return to work is associated with poorer outcomes
- Potential to improve employee and employer experiences...
- And reduce sick-leave related costs

Research aims

To inform best practice concerning:

Safe return to work

- as soon as possible without increased risk of complications

Effective return to work

- earliest time duties can be undertaken
- appropriate phased return to work
 - restricted duties
 - full duties
 - reduced hours
 - full time hours

Research team



Lisa Newington

Physiotherapist



**Dr Karen
Walker-Bone**

Rheumatologist



Prof Jo Adams

Occupational
Therapist



**Prof David
Warwick**

Hand Surgeon



Georgia Ntani

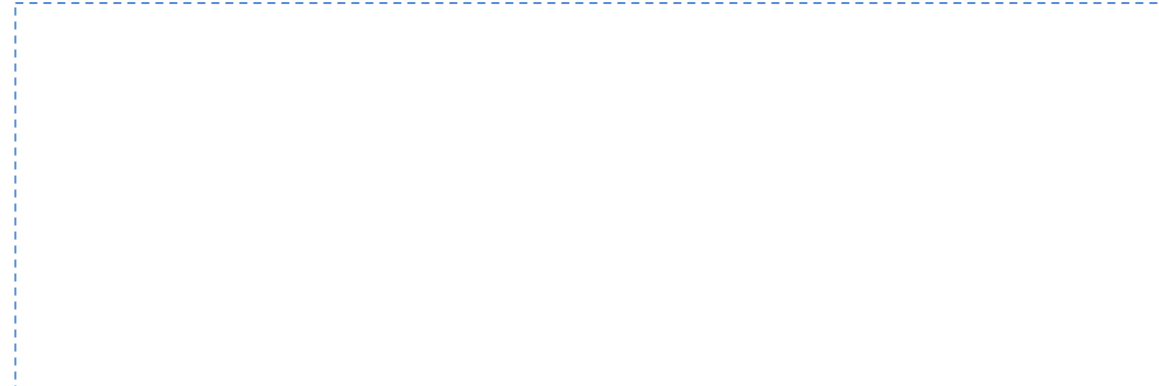
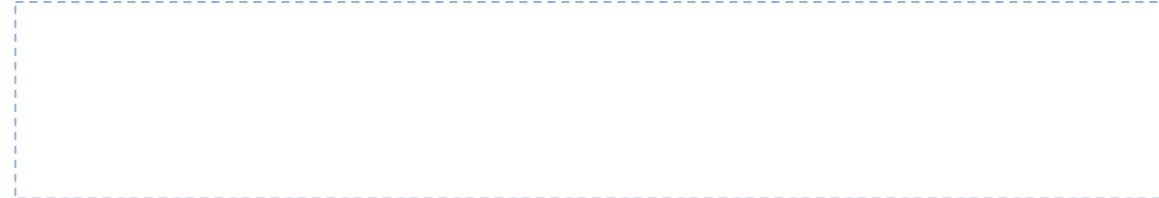
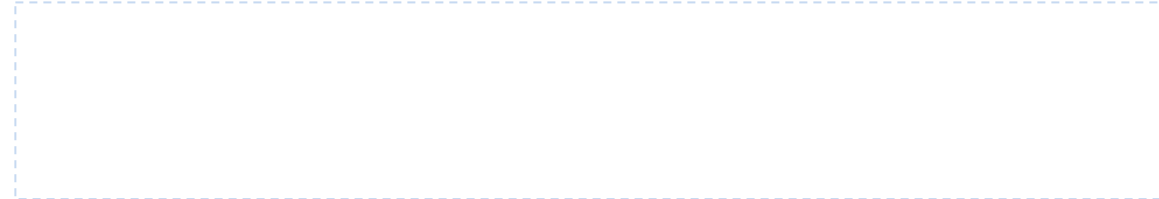
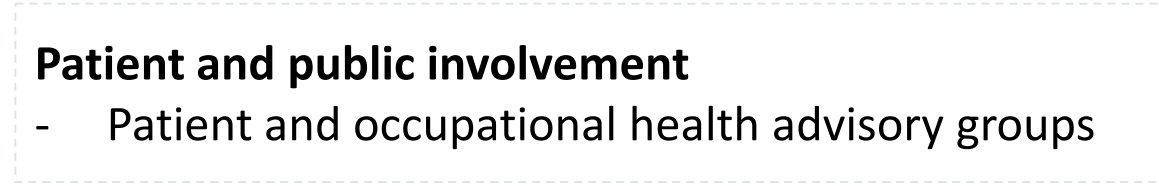
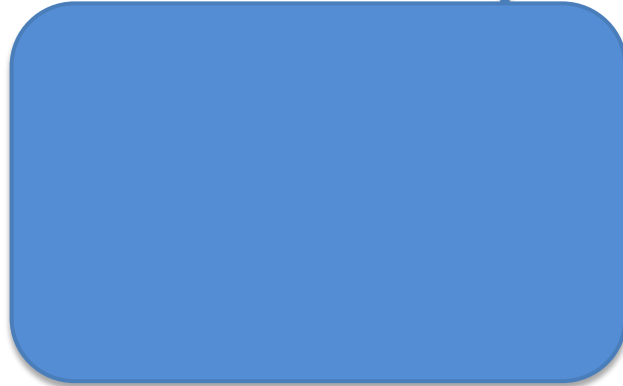
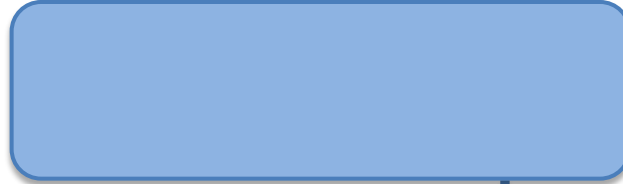
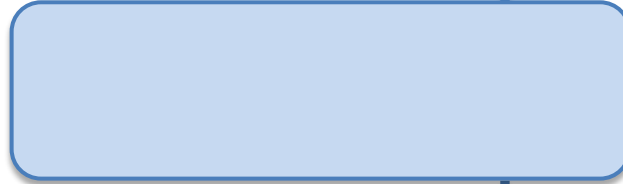
Statistician

Research questions and methods

Preliminary phase

Patient and public involvement

- Patient and occupational health advisory groups



Research questions and methods

Preliminary phase

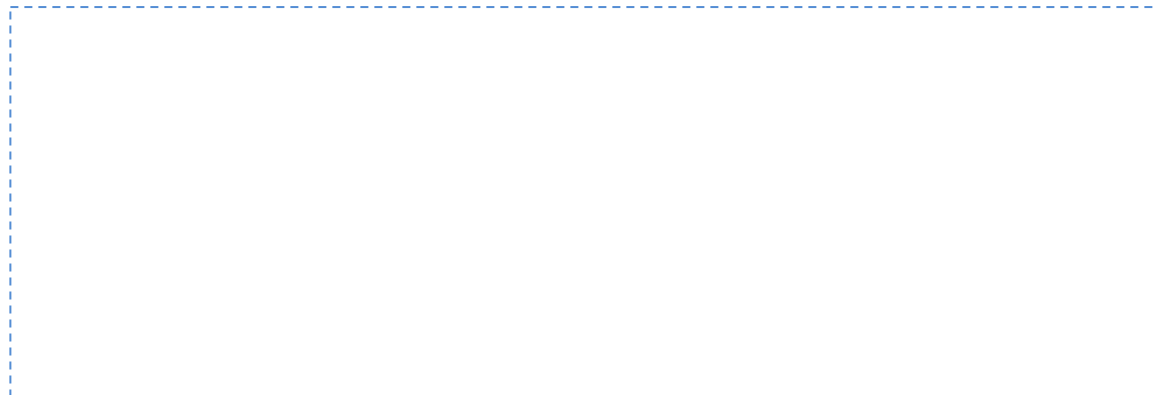
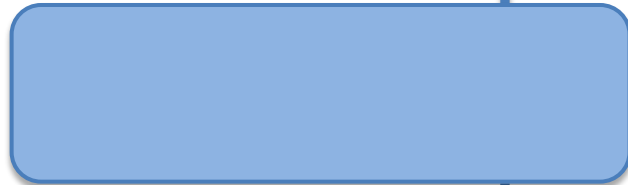
Patient and public involvement

- Patient and occupational health advisory groups

1. Review of existing evidence

Systematic review

- Return to work timescales after CTR
- Effectiveness of interventions to enhance RTW



Research questions and methods

Preliminary phase

Patient and public involvement

- Patient and occupational health advisory groups

1. Review of existing evidence

Systematic review

- Return to work timescales after CTR
- Effectiveness of interventions to enhance RTW

2. Identification of current practice

Survey of hand surgeons and hand therapists

- Return to work advice given to CTR patients
- Role of tailored advice



Research questions and methods

Preliminary phase

Patient and public involvement

- Patient and occupational health advisory groups

1. Review of existing evidence

Systematic review

- Return to work timescales after CTR
- Effectiveness of interventions to enhance RTW

2. Identification of current practice

Survey of hand surgeons and hand therapists

- Return to work advice given to CTR patients
- Role of tailored advice

3. Observation of patient outcomes

Prospective cohort study

- When do patients return to work after CTR?
- Is earlier return linked to poorer outcomes?

Focus group / interview study

- How do patients return to work
- What are the key barriers/facilitators?

Carpal tunnel syndrome and work

No consensus on optimal time course and method of post-operative return to work

Issues with reporting in studies:

- Occupation / work tasks
- Usual working hours / pattern
- Graded return (amended duties / reduced hours)
- Post-operative occupational performance
- Post-operative work related pain

Best Practice & Research Clinical Rheumatology 29 (2015) 440–453

Contents lists available at ScienceDirect

Best Practice & Research Clinical Rheumatology

ELSEVIER journal homepage: www.elsevierhealth.com/berh

7

Carpal tunnel syndrome and work

Lisa Newington^{a, b, c}, E. Clare Harris^{a, b},
Karen Walker-Bone, Associate Professor and Honorary
Consultant in Occupational Rheumatology^{a, b, *}

^a Arthritis Research UK/MRC Centre for Musculoskeletal Health and Work, University of Southampton, Southampton General Hospital, Tremona Road, Southampton, SO16 6YD, UK
^b MRC Lifecourse Epidemiology Unit, Southampton General Hospital, Tremona Road, Southampton, SO16 6YD, UK
^c Hand Therapy, Chelsea and Westminster Hospital NHS Foundation Trust, 309 Fulham Road, London SW10 9NH, UK

ABSTRACT

Keywords:
Carpal tunnel syndrome
Vibration
Repetition
Occupation
Return to work

Carpal tunnel syndrome (CTS) is the most common peripheral nerve entrapment syndrome, and it frequently presents in working-aged adults. Its mild form causes 'nuisance' symptoms including dysaesthesia and nocturnal waking. At its most severe, CTS can significantly impair motor function and weaken pinch grip. This review discusses the anatomy of the carpal tunnel and the clinical presentation of the syndrome as well as the classification and diagnosis of the condition. CTS has a profile of well-established risk factors including individual factors and predisposing co-morbidities, which are briefly discussed. There is a growing body of evidence for an association between CTS and various occupational factors, which is also explored. Management of CTS, conservative and surgical, is described. Finally, the issue of safe return to work post carpal tunnel release surgery and the lack of evidence-based guidelines are discussed.

© 2015 Elsevier Ltd. All rights reserved.

* Corresponding author. Arthritis Research-UK/MRC Centre for Musculoskeletal Health and Work, Medical Research Council Lifecourse Epidemiology Unit, University of Southampton, Southampton General Hospital, Southampton SO16 6YD, UK. Tel: +44 (0)23 8077624; fax: +44 (0)23 80704021.
E-mail address: kwb@mrc.soton.ac.uk (K. Walker-Bone).

<http://dx.doi.org/10.1016/j.berh.2015.04.026>
1521-6642/© 2015 Elsevier Ltd. All rights reserved.

What is current best practice?

Royal College of Surgeons

Supervisory/managerial	1-2 weeks
Light manual	2-4 weeks
(clerical/secretarial)	
Medium manual	4-6 weeks
(cleaner/nurse/check-out operative)	
Heavy manual	6-10 weeks
Custodial/rescue services	6-10 weeks



Get Well Soon

Helping you to make a speedy recovery after carpal tunnel release

Returning to work

Fact: Work can be part of your recovery

Everyone needs time off to recover after an operation - but too much of it can stand in the way of you getting back to normal. In fact, by staying off for too long, people can become isolated and depressed. Getting back to your normal work routine sooner rather than later can actually help you to recover more quickly.

Getting back to work

How quickly you return to work depends on a number of things:

- How you heal
- Whether one or both hands have been operated on
- The type of job you do, and how much strain it places on your hands.

People whose work involves frequent and heavy use of the hands or a lot of heavy lifting, for example, will not be able to return to work as quickly as those who have jobs which place less strain on their hands. Typing does not cause carpal tunnel syndrome (contrary to popular myth) and early return to gentle typing is probably good therapy.

How soon can I go back?

Every person recovers differently and has different needs. As general guidance, you can anticipate returning as follows:

PROSPERO International prospective register of systematic reviews

Systematic review of return to work timescales and strategies to enhance return to work after carpal tunnel release

Lisa Newington, Martin Stevens, Georgia Ntani, Jo Adams, David Warwick, Karen Walker-Bone

Citation

Lisa Newington, Martin Stevens, Georgia Ntani, Jo Adams, David Warwick, Karen Walker-Bone. Systematic review of return to work timescales and strategies to enhance return to work after carpal tunnel release. PROSPERO 2016:CRD42016034158 Available from http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016034158

Review question(s)

1. To identify and explore the range of return to work timescales following carpal tunnel release.
2. To identify and evaluate different strategies to enhance return to work after carpal tunnel release.

Searches

The review will be limited to publications in English due to limited time and resources to enable translation. No restrictions will be applied to year of publication, and both published and unpublished studies will be eligible for inclusion. The review will be limited to full text reports only to allow assessment of risk of bias for each study. Where conference abstracts, or other incomplete reports are identified, the primary reviewer (LN) will contact the lead authors for additional information.

The search strategy will include the following databases and registries, searching from the inception date of each resource to present. Both published and grey literature will be explored.

Databases:

MEDLINE (Ovid)

EMBASE (Ovid)

Web of Science (Thomson Reuters)

Scopus (Elsevier)

CINHAL (EBSCO)

AHMED (EBSCO)

PschiINFO (EBSCO)

PubMed (NCBI)

PEDro (George Institute for Global Health).

Options

Print

PDF

Share

Revision Notes

Revision History

Feb 8 2016 3:12PM

Feb 9 2016 9:48AM

Phase 1: systematic review

Phase 2: clinician survey

Clinicians regularly involved in carpal tunnel release procedures

- British Society of Surgery for the Hand (BSSH)
- Reconstructive Surgical Trials Network (RSTN)
- British Association of Hand Therapists (BAHT)
- Association of Surgeons in Primary Care (ASPC)

CTR frequency

Approximately how many elective carpal tunnel release procedures did you perform in the last 12 months?

None

1-10

11-30

31-70

71-100

>100

Surgical procedure

Thinking about all the elective CTRs you performed in the last 12 months: which surgical procedures did you use?

- a) Traditional open incision
- b) Mini open incision
- c) Endoscopic
- d) Other

CTR and work

Thinking about your patients in the last 12 months who were employed or self-employed at the time of their carpal tunnel release:

- a) What proportion were issued with a fit note by you personally?
- b) What proportion were given advice on returning to work at each of the following time points?
 - Pre-operatively
 - At the time of surgery
 - Post-operatively

Return to work after CTR

What is the earliest you would advise someone to return to work following carpal tunnel release for the following roles?

1, 2, 5, 7 days 2, 3, 4, 6, 8 weeks

- a) Desk-based duties (eg keyboard and mouse, writing, telephone)
- b) Repetitive light manual duties (eg driving, delivering small items, shelf-stacking)
- c) Heavy manual duties (eg construction)

Phase 3: observational study

What are the inclusion criteria?

All patients undergoing CTR who work >20 hours per week

What will participation involve for the patient?

Completing a pre-op and two post-op questionnaires

An invitation to participate in a one off focus group (~30 patients)

What will participation involve for the surgeon/clinic?

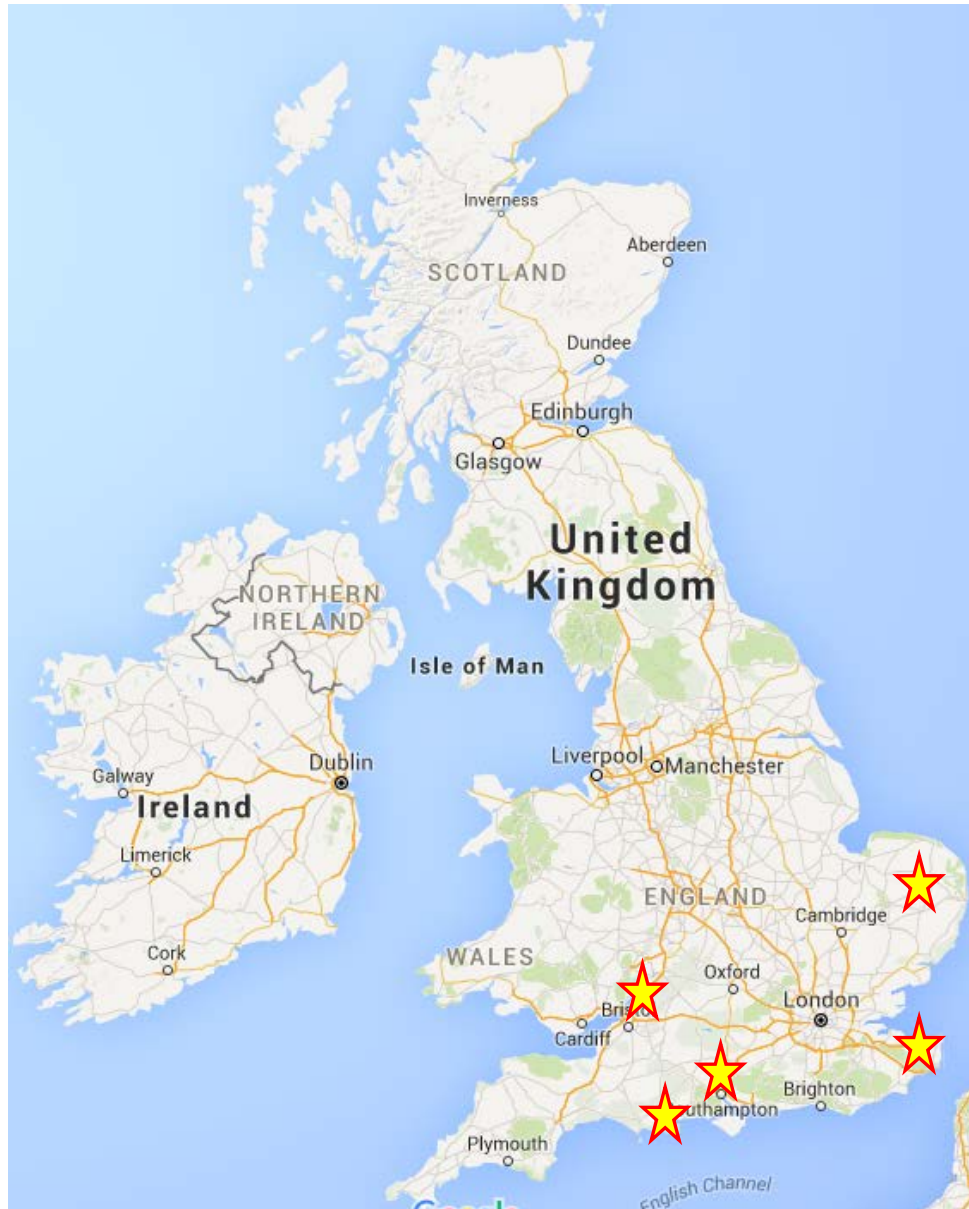
Identifying patients listed for CTR, providing initial study information and NCS

Involvement in an NIHR portfolio adopted study

Recruitment

- 400 patients
- Work >20 hrs/wk
- Start Spring 2017
- End Autumn 2018

Are you interested in being involved?



Contact details

Lisa Newington

email ln@mrc.soton.ac.uk

mobile 07866 997732

phone 023 8077 7624

Thank you!