

Centre for Evidence Based Hand Surgery

Report of

CEBHS Hand Fracture Research Workshop

Nottingham, 20th May 2016

To mark the launch of the Centre for Evidence Based Hand Surgery (CEBHS), the first Hand Fracture Research Workshop took place at the University of Nottingham on the 20th of May 2016. Over 40 hand surgeons and therapists from across the country (Annex 1) came together in an interactive workshop to consider how clinical research should investigate the treatment of common hand fractures.

Aims

The aims were:

- to bring together clinicians, therapists and researchers who want to contribute to the design and development of future multicentre trials in hand fractures
- to explore the potential to establish a Hand Fracture Research Group
- to agree high priority topics to address in a large multicentre trial

The programme included talks on key aspects of trial design, research setting group exercises and open discussion culminating in the prioritisation of research questions. Over the course of the day, group workshops were interspaced with short talks, in order to set the scene and highlight the challenges of developing and funding large scale clinical studies (Annex 2).

Small group discussion of research questions

During the small group sessions, participants discussed potential research questions relevant to treatment of hand fractures. These were brought together in a plenary session. The final list was, in no particular order:

- Primary treatment of displaced proximal phalangeal fractures
- Primary treatment of proximal interphalangeal joint (pilon-type) fracture-dislocations
- Primary treatment of metacarpal shaft fractures
- Primary treatment and the role of early imaging for suspected scaphoid fractures
- Early therapy interventions following acute distal radius fractures
- Primary treatment of (subluxed) mallet fractures
- Primary treatment of bony volar plate injuries (without subluxation/dislocation)

Prioritisation of research topics to take forward

The commonality and uncertainty in the management of each injury, as well as the feasibility and general interest of these topics as potential research questions were debated. Though each has their merits, it was decided, in the first instance, to prioritise and explore the ***primary treatment of displaced extra-articular proximal phalangeal fractures***. Arguments in favour were the lack of consensus in the management of this common group of injuries, the lack of high level existing evidence to guide practice, potential morbidity of failed treatments (in particular stiffness, which is difficult to treat and impairs function, and malunion resulting in deformity). Challenges identified were the diverse nature of this group of injuries, the multiplicity of treatment options and the potential difficulty in recruiting adequate numbers for meaningful comparisons in a randomised controlled trial.

Action plan for primary treatment of displaced extra-articular proximal phalangeal fractures

1. To undertake a systematic review of the evidence on “Interventions for the treatment of extra-articular displaced proximal phalangeal fractures in adults”. Alexia Karantana at the CEBHS will lead this, and invites others to work with her. An expression of interest will be circulated with more details on what will be involved.
2. To conduct a survey of practice for the treatment of proximal phalangeal fractures. This should investigate the frequency of proximal phalangeal fractures, current practice, complications, and interest in collaborating on a future trial. Again, details of this will be circulated. A survey will likely involve all of us tracking our relevant caseload over a set period of time.
3. Once the survey and systematic review are completed, review results and assess feasibility of a potential randomised trial. If taken forward, to establish a protocol working group. This will include patients who have suffered hand fractures.

The meeting demonstrated the large number of uncertainties about the management of hand fractures amongst hand surgeons and therapists, and the need for clarification of the role of different treatments for even some of the most common injuries routinely seen in our clinics. It also showed there is great enthusiasm to research the treatment of hand fractures on a multicentre basis. Such a collaborative approach can lead to research which allows clinicians, patients and funders to make joint decisions that are evidence-based.

Annex 1

Workshop Attendees

Bamford, Emma	Derby
Bhat, Muralidhar	East Surrey
Bray, Juliette	London
Bullock, Justine	Nottingham
Cerovac, Sonja	London
Clift, Zoe	Derby
Colville, James	London
Davies, Iona	Swansea
Downing, Nicholas	Nottingham
Eckersley, Rupert	London
Edwin, John	London
Foster, Mark	Birmingham
Gangopadhyay, Soham	South Tyneside
Giddins, Grey	Bath
Glasse, Nicole	Nottingham
Grindlay, Douglas	Nottingham
Harkness, Cassandra	Glasgow
Hassan, Sammi	Nottingham
Horton, Tracy	Derby
Jansen, Victoria	Derby
Jerosch-Herold, Christina	Norwich
Klenka, Sarah	Tyneside
Manushakian, Jacob	Plymouth
Mason, Will	Gloucestershire
Mckee, Andrew	Peterborough
Meikle, Caroline	Truro
Mudditt, Lynn	London
Nizar, Bafiq	Birmingham
Nuñez, Valerie	Frimley
Poulter, Rob	Truro
Quilliam, Anna	London
Rodrigues, Jeremy	Oxford
Rosa Mineiro, Joao	Truro
Smith, Andrew	East Kent
Smith, Hayley	Kent & Canterbury
Spiteri, Michelle	Oxford
Thomson, Sarah	Swansea
Triggs, Nicole	Kent & Canterbury
Wade, Christina	Peterborough & Stamford
West, Emily	Bristol
Williams, James	London

Speakers / Facilitators

Davis, Tim	Hans Surgeon, Honorary Professor, Nottingham University Hospitals NHS Trust
Downing, Nick	Hand Surgeon, Nottingham University Hospitals NHS Trust
Duley, Lelia	Director, Nottingham Clinical Trials Unit
Eckersley, Rupert	Hand Surgeon, Chelsea & Westminster Hospital London
Hepburn, Trish	Senior Statistician, Nottingham Clinical Trials Unit
Jerosch-Herold, Christina	Reader in Occupational Therapy, University of East Anglia
Karantana, Alexia	Clinical Associate Professor in Hand Surgery, University of Nottingham
Layfield, Carron	Manager, UK Dermatology Clinical Trials Network, Centre of Evidence Based Dermatology, University of Nottingham
Rodrigues, Jeremy	NIHR Academic Clinical Fellow, University of Oxford
Scammell, Brigitte	Professor of Orthopaedic Sciences, University of Nottingham
Whitham, Diane	Research Manager, Nottingham Clinical Trials Unit
Wragg, Andrew	Patient and Public Involvement Facilitator, Nottingham University Hospitals NHS Trust

Annex 2

CEBHS Hand Fracture Research Workshop Program

09:00 Coffee

09:30 BSSH and Hand Fracture Research

09:40 Choosing and developing the research question

Learning the Hard Way — a clinician's experience (2009-2016)

Quiz - what is controversial and important

Group workshop: What would be a good study questions on hand fractures?

Presentation of group results and open discussion

Experience of research networks in dermatology

Multidisciplinary approach to RCT

12:05 Lunch

13:00 Patient participation in clinical studies and outcome assessment

Patient and public involvement

Assessment of outcome in multicentre RCTs

13:30 Studies which influence policy and practice

Large scale trials that inform policy and practice

Is this really pragmatic - use of PRECIS tool?

Group assessment of paper - How pragmatic is this study?

15:15 Tea Break

15:35 Open Discussion

What do you think would be a good research question and how would you develop it?

A Hand Fracture Research Group?

16:55 End of Workshop