KADOORIE CENTRE FOR CRITICAL CARE RESEARCH AND EDUCATION

KADOORIE

Oxford Trauma

Research & Development

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OUR RESEARCH

THEMES

- Effectiveness of treatments
- Rehabilitation
- Patient / Staff experience

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Costa ML, Achten J, Marian I, Dutton S, Lamb S, Ollivere B, Maredza M, Petrou S, Kearney R. Plaster cast versus functional brace for non-surgical treatment of Achilles tendon rupture (UKSTAR): a multicentre randomised controlled trial and economic evaluation. Volume 395, Issue 10222, 8–14 February 2020, Pages 441-448 https://www.thelancet.com/ journals/lancet/article/PIIS0140

-6736(19)32942-3/fulltext https://www.ndorms.ox.ac.uk/

news/researchers-recommend

The aim of the Path-2 study was to determine whether platelet rich plasma (PRP) improves outcomes after an acute Achilles tendon rupture. PRP is blood plasma containing high concentration of platelets, specialised blood cells involved in wound healing.

Patients were randomised to receive standard non operative care and PRP injection or standard non operative care and a placebo (dry needle) injection. 230 adults took part in the study which was conducted at 19 hospitals in the UK. The primary outcome in this study was muscle tendon function

UKSTAR

<u>-early-walking-in-a-brace-for-achilles-tendon-rupture</u>

We are delighted this paper has been published in the Lancet. This study is the culmination of many years of hard work by the team, clinical staff and patients. An enormous thank you to everyone who helped with this study.

The study compared outcomes for two treatments, a plaster cast or functional brace, a ridgid walking boot, for 8 weeks, after a rupture of the Achilles tendon. 540 patients

PATH-2

measured at 24 weeks. The findings showed no difference in muscle tendon function between participants receiving PRP injections and those receiving placebo injections.

Keene D, Alsousou J, Harrison P, Hulley P, Wagland S, Parsons S, Thompson J, O'Connor HM, Schlüssel MM, J Dutton SJ, Lamb SE, Willett K.

Platelet rich plasma injection for acute Achilles tendon rupture: PATH-2 randomised, placebo controlled, superiority trial. BMJ. 2019; 367: 16132. Published online 2019 Nov 20. doi: 10.1136/ bmj.16132



took part. The study showed that the plaster cast was not superior to the functional brace at 9 months post injury and costs were similar. This evidence provides clinicians and patients with the opportunity to chose between treatments, depending on circumstances, knowing that they have similar outcomes.

The timing of weight bearing is of interest. Those in the functional boot could potentially fully weight bear throughout the 8 weeks and those in the cast, normally from 6 weeks.

Contact: Susan Wagland



https://www.bmj.com/ content/367/bmj.l6132

https://www.ndorms.ox.ac.uk/ news/platelet-rich-plasma-foundto-be-of-no-benefit-in-treatingtorn-achilles-tendon

https://www.bmj.com/content/ bmj/367/bmj.I6132.full.pdf

Contact: Susan Wagland



Marie Mestre, Susan Wagland, Samira Mohamed

WOLLF

Patient Experience

WOLLF Patient experience of open lower limb fracture 2-4 years post injury

The UK WOLLF Wound Management of Open Lower Limb Fractures trial compared standard dressings with negative pressure wound therapy. Interviews undertaken as part of this trial aimed to explore patients' experience of recovery from an open fracture of the lower limb 2-4 years post injury.

The interviews highlight patients struggle to recover from their injury. This struggle was evident in patients' experience of being disempowered, being changed and being myself. Being dependant on others and the uncertainty about their future led patients to be disempowered. Dependency created frustration, distress and lowered mood. Feelings of uncertainty about the future and their potential for recovery could provoke anxiety.

"I would say that was the toughest part of it, the unendingness of it, it was just constant and it was horrible". Patient quote.

After their injury, patients were changed. They felt their body was more fragile, less reliable and in need of protection. They experienced a loss of fluidity and pace of movement and persistent pain reduced their ability to move and join in activities. Patients experienced a loss of self as they looked and felt different and were unable to participate in activities that defined them. Patients tried to integrate their past and present self-identity and find meaning in what happened to them.

Rees S, Tutton E, Achten J, Bruce J, Costa, M. Patient

experience of long term recovery after open fracture of the lower limb: A qualitative study using interviews in a community setting. BMJOpen2019;9:e031261. Doi:10.1136/bmjopen-2019-031261

https://bmjopen.bmj.com/ content/9/10/e031261.full

Contact: Liz Tutton

Trauma Trials Annual Meeting

The 8th National Institute for Health Research, Orthopaedic Trauma Society, Trauma Trials annual meeting was held in Gateshead this year. A broad range of patient partners, clinicians, research associates, researchers and research staff attended. The microphone was in a ball this year and Prof Matt Costa threw it about the auditorium with some success!

The discussion was animated and covered study results, WHiTE, WHiTE 4, WHIST, UKSTAR, those starting recruitment, FAME, WAX, POINT, ORIF and those recruiting in the future, HUSH, CRAFFT and FRUTI. You will hear about these studies in our newsletters and links will be provided for more detail. We heard about the Swedish Fracture Registry from Olof Wolf and the benefits of embedding studies in large ongoing data sets. There was discussion about funding, 'buy in' from sites, upkeep of the registry and the potential to link with other databases.

Prizes were awarded to many teams. The team from Kings College Hospital won top recruiter again this year. They are planning to improve the



Hazel Giles, Harsha Virdee, Kerim Gokturk, Ines Reichert

speed of their 'return of data' for next year. Louise Mew from Milton Keynes enjoyed her



basket of goodies and Matt is pictured with Alison Armstrong from Leicester. A big thank you to everyone for working so hard this year on so many studies.



FAME

study AIM used this technique for people over 60 years of age and found that casting was as good as surgical treatment. The FAME study is researching outcomes and complications for both treatments for people aged 18-60 years old. Recruitment is going well and more sites are coming on board. More information can be found on the FAME website.



https://www.ndorms.ox.ac.uk/ clinical-trials/current-trials-andstudies/fame

Click on the FAME logo on the website and you will get access to the patient information video and written information.

Contact: Susan Wagland

FAME The Fractured Ankle Management Evaluation

This study is focused on ankle fractures and has opened to recruitment. It is comparing treatment with surgical fixation, with screws and a plate, with close contact casting (CCC). CCC is a plaster cast which is carefully shaped around the patient's ankle. Our previous

Study Updates

The **WHITE** studies are all going well. WHITE 5 has finished recruitment, WHITE 8 has recruited 146 patients in Oxford and WHITE 9, a feasibility study, has finished recruitment.

Congratulations also to the **AFTER** team, assessing intensive physiotherapy versus self management advice after ankle fracture, who have finished recruitment ahead of schedule. Follow up and interviews have also been completed.

SCIENCE is looking at two treatments for a broken bone in the elbow, in children. Recruitment has been great, 56 children so far and 25 parents have been interviewed.

CRAFFT is in set up and hoping

The WHIST trial explored dressings that create a partial vacuum over the wound with standard dressings after surgery to the lower limb. Deep wound infection is a concern after surgery in trauma patients. This is due to damaged muscles and tissues that are less able to resist to start in the summer. This study is looking at two treatments for wrist fracture in children.

Hipgen explores the impact of Stem cells on recovery. We have successfully recruited two patients, the first patients in the UK. It is an intense exhausting process that requires help from across the organisation. Thank you to everyone who is supporting this study.

CO-OLF, the final consensus meeting for developing a core outcome set for open fractures of the lower limb has taken place and write up is in progress.

Wax which explores weight bearing after ankle fracture has started recruitment and nine patients have been interviewed. This is not running in Oxford as we are recruiting to FAME.

HUSH treatments for the upper arm is in set up and open to new sites.

FRUTI treatments for hip fracture is in set up and open to new sites.

Welcome to Anna Corby who joins the research nurse team.

Meetings

The Trauma and Emergency Care meeting, Trauma Research Network, Trauma Cluster sessions, Lead Nurse Research Forum have been cancelled but will be reinstated in the Autumn. Currently trauma recruitment has been paused whilst we focus on Covid 19 research studies.

WHIST

infection. New dressings may help reduce infection. In this study 1548 patients were recruited from 24 hospitals, including Oxford.

The findings show there was no significant difference in deep surgical site infection at 30 days. This paper is now published.



https://jamanetwork.com/journals/ jama/fullarticle/2760736

https://www.ndorms.ox.ac.uk/ clinical-trials/current-trials-andstudies/whist

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To find out more about our research studies and staff visit our web page <u>www.ouh.nhs.uk/kadoorie</u>

Useful Links

skeletal Sciences: <u>www.ndorms.ox.ac.uk</u> University of Oxford: <u>www.ox.ac.uk</u> Injury Minimization Programme for Schools (I.M.P.S.): <u>www.impsweb.co.uk</u> Local Patient and Public Involvement opportunities: <u>https://www.clahrc-oxford.nihr.ac.uk/public-involvement/public-involvement/public-involvement-newsletters#involvement-matters</u>

amrita.athwal@ndorms.ox.ac.uk daniel.perry@ndorms.ox.ac.uk david.keene@ndorms.ox.ac.uk debbie.langstaff@ouh.nhs.uk duncan.appelbe@ndorms.ox.ac.uk julie.wright@ouh.nhs.uk iuul.achten@ndorms.ox.ac.uk kathryn.lewis@ouh.nhs.uk katy.mironov@ndorms.ox.ac.uk keith.willett@ndorms.ox.ac.uk lauren.exell@ndorms.ac.uk liz.tutton@ouh.nhs.uk louise.spoors@ndorms.ox.ac.uk maria.mestre@ouh.nhs.uk marta.campolier@ndorms.ox.ac.uk matthew.costa@ndorms.ox.ac.uk oxfordtrauma@ndorms.ox.ac.uk stephanie.wallis@ndorms.ox.ac.uk susan.wagland@ndorms.ox.ac.uk tessa.sewdin@ouh.nhs.uk xavier.griffin@ndorms.ox.ac.uk

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