

Surgical versus non-surgical management of lateral compression type-1 pelvic fracture in adults 60 years and older: the L1FE RCT

Elizabeth Cook,^{1*} Joanne Laycock,¹
Dhanupriya Sivapathasuntharam,² Camila Maturana,¹
Catherine Hilton,² Laura Doherty,¹ Catherine Hewitt,¹
Catriona McDaid,¹ David Torgerson¹ and Peter Bates²

¹York Trials Unit, Department of Health Sciences, University of York, York, UK

²Bart's Health NHS Trust, The Royal London Hospital, London, UK

*Corresponding author liz.cook@york.ac.uk

Disclosure of interests

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, or available in the toolkit on the NIHR journals Library report publication page at <https://doi.org/10.3310/LAPW3412>.

Primary conflicts of interest: Peter Bates holds educational contracts with Johnson and Johnson and Zimmer Biomet, for delivering teaching, visitations and webinars. He is one of the design surgeons for a pelvic plating system, 'Phoenix' manufactured by ITS. This plating system is not used in the treatment of fragility lateral compression type-1 (LC-1) pelvic fractures. He is a senior lecturer at Queen Mary University of London (QMUL), in Orthopaedic Trauma Sciences. Catherine Hewitt is a member of the National Institute for Health and Care Research (NIHR) Health Technology Assessment (HTA) Commissioning Board (2015–present) and Deputy Chair (2019–present). Catriona McDaid is a member of the NIHR HTA and EME Editorial Board (2017–present), NIHR Pre-doctoral Fellowship Selection Committee (2019–present) and NIHR Programme Grants for Applied Research Sub-committee B (2020–present). Catherine Hilton received NIHR Pre-doctoral Clinical and Practitioner Academic Fellowship Bridge (2021–2).

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Plain language summary

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Plain language summary

When older adults with weak bones fall onto their side, they can fracture the pelvis in a certain way known as a 'lateral compression type-1 fracture'; this summary will use 'pelvic fracture'.

Pelvic fractures can heal without surgery; patients are offered pain relief and encouraged to move as much as they can after the injury. Pelvic fractures can be painful, and some people are not able to get up and walk for weeks. These fractures can cause health problems such as chest infections, urinary tract infections, pressure sores and blood clots. To avoid these problems, we are trying to find treatments to help people recover sooner. Pelvic surgeons think patients may benefit from surgery with an internal fixation device (a bar and screws) to stabilise the pelvis; however, there can be risks and complications with any surgery.

This study aimed to find out which treatment is better for patients and better value for money for the National Health Service. This required 600 people aged over 60, in hospital with a pelvic fracture and having difficulty walking to take part. Three hundred would receive surgery and 300 would receive non-surgical treatment. Over 6 months, participants would complete questionnaires, a walking assessment and have X-rays to check healing. The trial had a 12-month run-in period to see if enough people would take part.

The trial closed early as we were unable to recruit sufficient people into the study. Fewer older patients with pelvic fractures were identified than expected, 51% were able to walk after a few days and therefore were not eligible to be included in the study. Of the patients, 13.6% were eligible and 30.6% of those consented to take part. Restrictions on visitors during the coronavirus disease 2019 pandemic made it difficult to discuss the study with patients' families and fewer patients were admitted to hospital where the study was taking place. The research question could not be answered by this study at the present time.

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