



The Bone & Joint Journal

Over 70 years of orthopaedic excellence

Griffin XL, Achten J, O'Connor HM, Cook JA, Costa ML, on behalf of the WHiTE Four Investigators. Effect on health-related quality of life of the X-Bolt dynamic plating system versus the sliding hip screw for the fixation of trochanteric fractures of the hip in adults: the WHiTE Four randomized clinical trial. *Bone Joint J.* 2021;103-B(2):256-263.

<https://doi.org/10.1302/0301-620X.103B.BJJ-2020-1404.R1>

8 June 2021

Author reply:

Sir,

We thank Curlewis et al for their careful consideration of our recently published study¹ and the constructive framing of their questions and comments.

We recognize that it is possible that some revision surgery might have been carried out after final follow-up at 12 months. Revision surgery was a secondary outcome and we reported a very low absolute risk (overall: 24/894, 3%). We therefore believe that the small number of events that may have occurred later than 12 months would not have biased the result.

The final participants' 12-month follow-up was in April 2019, before the onset of the COVID pandemic, so will not have had an impact on revision timings.

We can provide further clarification of the 20 crossovers from the X-Bolt Hip System (XHS) to sliding hip screw (SHS) reported as "surgeon choice". Seven were due to no X-bolt representative being available, six occurred because a different surgeon carried out the operation due to cancellation, five gave no clear reason beyond surgeon choice, one in which surgery was repeatedly cancelled, and one in which the surgeon's view was that a trochanteric extension plate could not be used with the X-bolt.

We recognize that the attrition (43%) in the (four-month) functional status outcome was considerable.¹ However, the 12-month functional outcome data were very similar, with the same median (3) and interquartile range (2 to 4) for both groups, as were the results of analysis when analyzed in the same way (ordinal regression adjusted for centre, age, sex, and cognitive impairment at baseline, odds ratio of 0.84, 95% confidence interval (0.62, 1.14), p-value = 0.261). This provides some reassurance about the robustness of the finding. Furthermore, it should be noted that 21% and 29% of the participants had died before four and 12 months, respectively, and that the available data represent 73% (n = 647) and 69% (n = 551), respectively, of the surviving participants. Taken in the context of this frail population, while bias due to missing data is possible, we do not see any indication that this has occurred and we consider it unlikely.

We did collect radiological measures during the trial, although only from radiographs collected as part of routine clinical practice. These data are therefore complex, incomplete and, under a recommendation from the Oversight Committee, will be published elsewhere. These data are in preparation for publication in due course.

X. L. Griffin, PhD,
Professor of Trauma and Orthopaedic Surgery, Honorary Consultant Trauma and Orthopaedic Surgeon,
Barts and The London School of Medicine and Dentistry, Queen Mary University of London, Barts Health NHS Trust,
London, UK.

J. Achten,

H. M. O'Connor,

J. A. Cook,

M. L. Costa,

on behalf of the WHiTE Four Investigators.

Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford,
Oxford, UK.

1 Griffin XL, Achten J, O'Connor HM, Cook JA, Costa ML, on behalf of the WHiTE Four Investigators. Effect on health-related quality of life of the X-Bolt dynamic plating system versus the sliding hip screw for the fixation of trochanteric fractures of the hip in adults: the WHiTE Four randomized clinical trial. *Bone Joint J.* 2021;103-B(2):256-263.