

Timing of surgical intervention for developmental dysplasia of the hip: a randomised controlled trial (Hip 'Op)

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Declared competing interests of authors: Andrew Cook is the vice chairperson of the National Institute for Health and Care Excellence's Interventional Procedures Advisory committee. It is possible that the committee will issue guidance related to the management of hip dysplasia and, if so, it would use information in this report. Andrew Cook also reports that he is part of a secretariat for a number of National Institute for Health Research (NIHR) committees: in the NIHR Health Technology Assessment programme – The Intervention Procedures Topic Identification, Development and Evaluation (TIDE) panel and the Prioritisation Group; in the NIHR Public Health Research programme – the Research Funding Board and the Prioritisation Group. He is a voting member of the West Midlands Regional Advisory Committee for the NIHR Research for Patient Benefit programme.

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Plain English summary

The Hip 'Op RCT

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Plain English summary

Developmental dysplasia of the hip is a common birth problem caused by irregular hip development in babies. Babies born bottom first, and those with a family history of hip problems, are most at risk. When the diagnosis is made at > 3 months of age, surgery is almost always needed. The aim of surgery is to correct the hip position and restore normal movement.

Surgery can be complicated by avascular necrosis, in which the blood supply to the hip is interrupted. This can be devastating for the growing hip, leading to joint damage and, ultimately, hip replacement.

Some surgeons accept that babies treated early may need to be in plaster for longer, but may achieve better results, although there is a greater need for further surgery. Meanwhile, other surgeons believe that intentionally delaying treatment, until the development of a bony ossific nucleus in the hip, may necessitate a bigger operation initially, but will result in less additional surgery in later life.

There is no international agreement among paediatric surgeons regarding whether early or delayed treatment is best. This study was designed to address this question.

This was an ambitious randomised clinical trial that required 636 babies to be recruited and randomised to either early or intentionally delayed surgical treatment and then followed up over 5 years across 15 UK centres. As a precaution, it was decided to have an 18-month run-in period to see if it was likely that this recruitment could be achieved.

The trial closed early as a result of poor recruitment, and so the question could not be answered. Nevertheless, part of the research involved interviews with 14 families and highlighted rich data about getting access to expert orthopaedic care, the impact of the child's surgery on family life and also what it was like to take part in this trial.

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This report

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