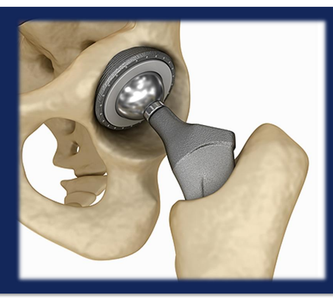
Hip precautions after hip operation (HippityHop): results of a before and after study



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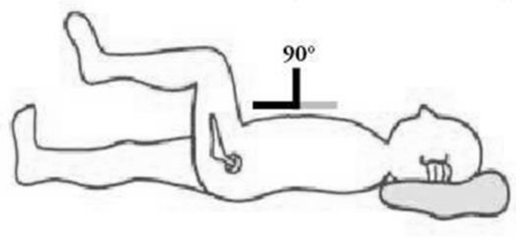
Introduction

- Total hip replacement (THR) is an effective surgical procedure to address persistent joint problems, including pain, reduced mobility, and decreased quality of life (QoL). In the UK, over 100,000 THRs were performed in 2017 [1]
- To protect the new joint from risk of dislocation (a recognised complication of THR surgery) patients are routinely advised to restrict certain movements ('**hip precautions**')

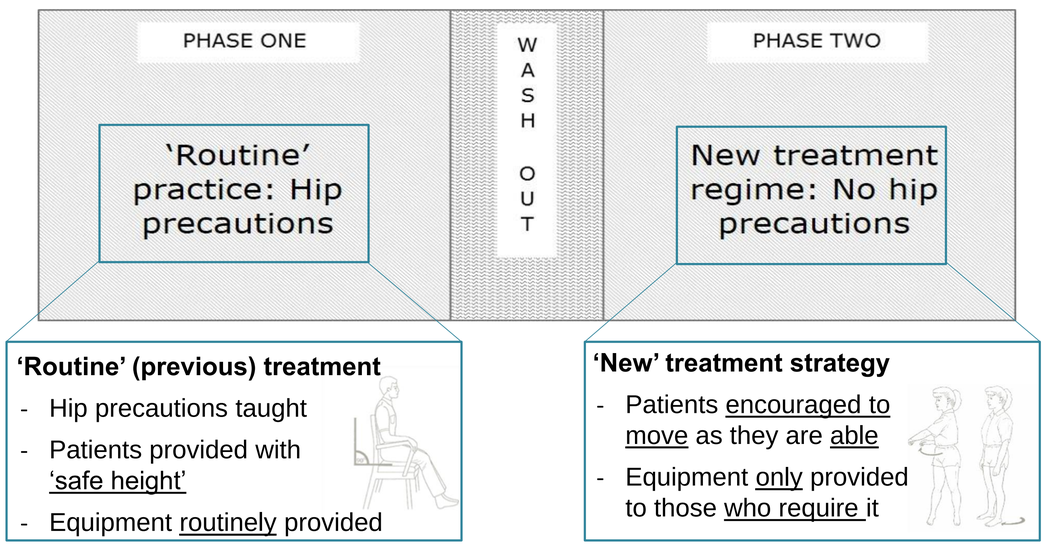


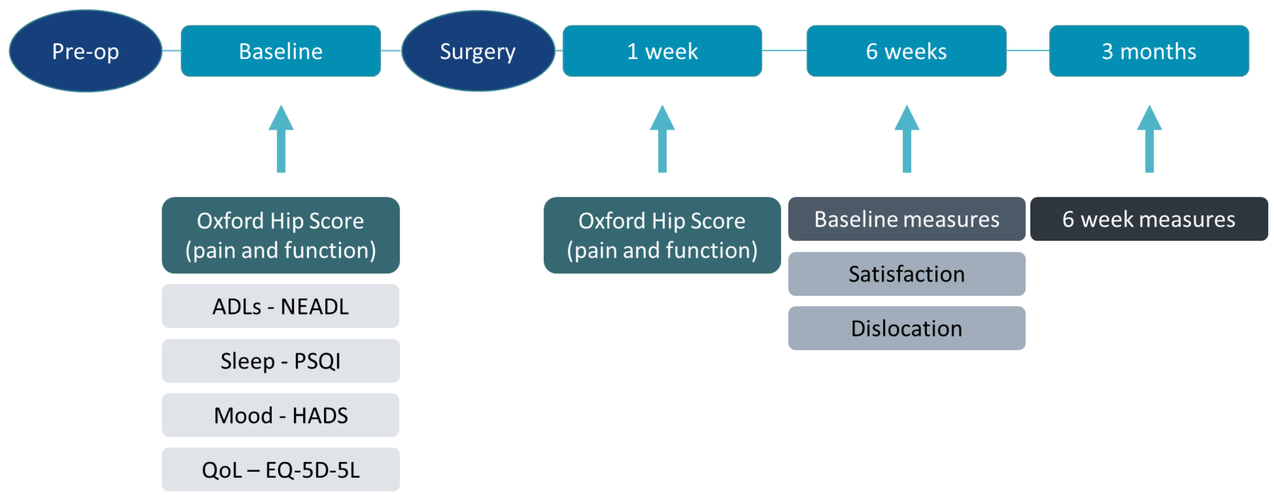
- Hip precautions are generally prescribed for 6-12 weeks post-surgery, and typically involve advising patients to avoid flexing their hip beyond 90 degrees, adduction, and rotation of the hip [2]
- Despite being routinely provided, there is a lack of evidence to support the use of precautions [3] and large discrepancies in the provision of hip precautions exist in the UK [2, 4]

Aim

- To determine the effect of precautions on patient outcomes following THR by comparing outcomes of patients who received hip precautions with those who did not

Methods





- Data was assessed using t-tests and two one-sided test (TOST) procedure

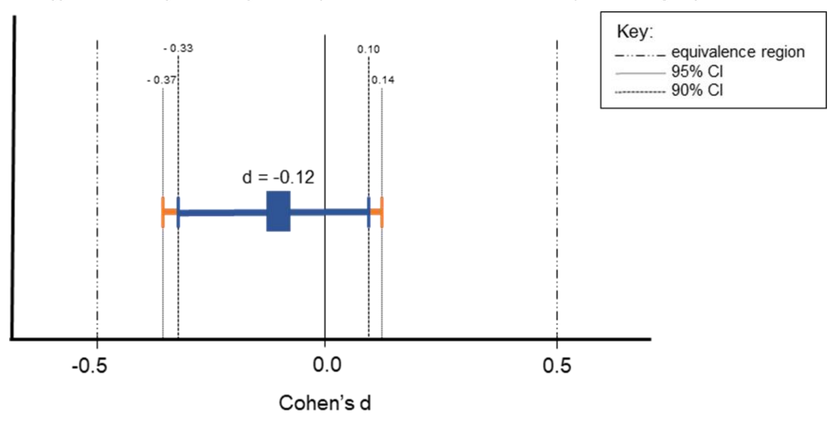
Results

Phase one (hip precautions)
118 primary THR patients
67±11 years, 73% ♀,

Phase two (no hip precautions)
119 primary THR patients
68±10 years, 85% ♀,

- Equivalence analysis (TOST) showed that the observed effect size of the mean difference in the Oxford Hip Score (OHS) of the two groups at three months post-surgery (d = -.12) was significantly within the equivalent bound of Cohen's d: -.5 and .5, t (214) = 2.93, p = .002

Differences of the Oxford Hip Score at three months post-surgery



- No significant differences were observed between the two groups at baseline, six weeks, and three months for the OHS, NEADL, PSQI, HADS, and EQ-5D-5L. However, at one week postoperatively, the no hip precautions group had a significantly greater OHS score (i.e. better function and less pain) (25.00 (±6.56)) than the hip precautions group (29.20 (±7.26)) (p <.001)

Discussion

- The findings demonstrate that hip precautions provided no additional benefit as patients had similar outcomes regardless of whether they received precautions or not
- The findings lend evidence to support the the discontinuation of hip precautions from routine clinical practice for primary THRs

References

[1] National Joint Registry, 2018. 15th Annual Report 2017: National Joint Registry for England, Wales, Northern Ireland and the Isle of Man. http://www.njrreports.org.uk/; [2] Drummond et al., 2012. Precautions following Primary Total Hip Replacement: A National Survey of Current Occupational Therapy Practice. The British Journal of Occupational Therapy, 75(4), pp. 164-170.; [3] Smith et al., 2016. Assistive devices, hip precautions, environmental modifications and training to prevent dislocation and improve function after hip arthroplasty. The Cochrane Database of Systematic Reviews, 7, CD010815.; [4] Smith and Sackley, 2016. UK survey of occupational therapist's and physiotherapist's experiences and attitudes towards hip replacement precautions and equipment. BioMed Central (BMC) Musculoskeletal Disorders, 17(1), 1-9.