

FIRST-LINE TREATMENT FOR FEMOROACETABULAR IMPINGEMENT SYNDROME: COMPARING A 6-MONTH SUPERVISED EXERCISE INTERVENTION TO USUAL CARE ON HIP-RELATED QUALITY OF LIFE. A PROTOCOL FOR A MULTICENTER RANDOMIZED CONTROLLED TRIAL

Frederik Nicolai Foldager^{1,2}, Signe Kierkegaard-Brøchner^{2,3}, Joanne L Kemp⁴, Maurits van Tulder⁵, Bo Martin Bibby⁶, Bent Lund², Bjarne Mygind-Klavsen¹, Ulrik Dalgas⁷ and Inger Mechlenburg^{1,3,7}

¹Department of Orthopaedic Surgery, Aarhus University Hospital, Denmark, ²Department of Physio and Occupational Therapy and Orthopaedic Surgery, Horsens Regional Hospital, Denmark, ³Department of Clinical Medicine, Aarhus University, Denmark, ⁴La Trobe Sport and Exercise Medicine Research Centre, La Trobe University, Australia, ⁵Faculty of Behavioural and Movement Sciences, Vrije University, Amsterdam, ⁶Department of Biostatistics, Institute of Public Health, Aarhus University, Aarhus, Denmark & ⁷Exercise Biology, Department of Public Health, Aarhus University, Denmark

1. INTRODUCTION AND AIM

INTRODUCTION

- Femoroacetabular impingement syndrome (FAIS) is a clinical condition of the hip associated with pain, reduced physical function, and hip-related quality of life (QoL). Interestingly, higher maximal muscle strength is associated with less pain, better physical function, and improved QoL in people with FAIS.

AIM

- To investigate the clinical effectiveness and cost-effectiveness of a 6-month supervised strength exercise intervention compared to usual care in patients with femoroacetabular impingement syndrome (FAIS).

SPONSORS & COLLABORATORS



2. MATERIALS & METHODOLOGY

MULTICENTER TRIAL

- Aarhus, Horsens, Hvidovre, Aalborg, Odense and Melbourne.

52/120 PATIENTS

- Eligible patients: (+18) with clinically and radiographically verified FAIS.



PATIENT ASSESSMENT



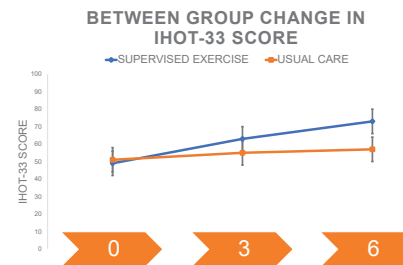
RANDOMISATION (1:1)

- USUAL CARE**
Referral to physiotherapist. Physical activity and exercise recommendation.
- SUPERVISED EXERCISE**
2x/week for 6 months. 12 supervised sessions. Physical activity recommendation.

3. OUTCOMES & ANALYSIS

CLINICAL EFFECTIVENESS

- Hip-related quality of life measured at 6 months using the International Hip and Outcome Tool 33 (iHOT-33). Between-group difference using a linear mixed effect model.



Example (not based on data): Visualization of changes in iHOT-33 score in the strength exercise group and the usual care group at baseline, 3- and 6-month follow-up with 95% Confidence Intervals.

HEALTH ECONOMIC EVALUATION

- Cost-utility and cost-effectiveness measured at 12 months using Quality Adjusted Life Years (QALYs) and iHOT-33.



12

4. RESEARCH CONTRIBUTION

- This study is the first randomized controlled trial to address the lack of clinical evidence for an exercise intervention compared to usual care in the first-line management of FAIS.
- This study contributes valuable insights into the economic implications of implementing an exercise intervention compared to usual care in the first-line management of FAIS.
- This study's implications are relevant to patients, physiotherapists, orthopedic surgeons, and health-decision policymakers.

5. PUBLISHED PROTOCOL



6. CONTACT

Frederik Nicolai Foldager
Frederikfoldager@clin.au.dk