Hip Pain in Younger Adults

EXPLORING REHABILITATION FOLLOWING PERIACETABULAR OSTEOTOMY FOR ACETABULAR DYSPLASIA: A QUALITATIVE STUDY ON PATIENTS’ CHALLENGES, ASPIRATIONS AND EXPECTATIONS

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Introduction Guidelines for post-operative rehabilitation following periacetabular osteotomy (PAO) have been established. However, the perspectives of patients undergoing PAO within different healthcare systems have not been considered. The present study aims were to explore perceived challenges in everyday life and aspirations and expectations of post-operative rehabilitation from the perspectives of Danish and Australian patients with acetabular dysplasia undergoing PAO.

Material and Methods We used a phenomenological-hermeneutic approach with semi-structured interviews to investigate the perspectives of twenty-six participants (5 males), aged between 15 and 43 years, who underwent a PAO. A purposeful sampling approach on age and sex coupled with criterion was used. Inclusion criteria involved: above 15 years, radiologically verified acetabular dysplasia, PAO within the last seven weeks, and undergoing post-operative rehabilitation. The interviews were analysed with an inductive content analysis approach.

Results Analysis of interview transcripts revealed four major themes across country populations: Different expectations, Self-confidence, tailored rehabilitation, and aligning expectations. Within each theme, subthemes emerged, and patterns across countries were identified with minimal variations. Accordingly, the economic burden of self-financed surgery and rehabilitation was challenging for certain Australian participants.

Conclusion Our findings elucidate the diverse range of aspirations and expectations among patients undergoing PAO, and how these relate to perceived challenges. Notably, the findings underscore the importance of aligning the expectations between patients and clinicians when tailoring rehabilitation for each patient.

Knee and Osteoarthritis

DOES LOWER-LIMB OSTEOARTHRITIS ALTER MOTOR CORTEX DESCENDING DRIVE AND VOLUNTARY ACTIVATION? A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction Quantify motor cortex descending drive and voluntary activation in people with lower-limb osteoarthritis compared to controls.

Materials and Methods Systematic review and meta-analyses according to the PRISMA guidelines. Seven databases were searched until 30/12/2022. Studies assessing voluntary activation or responses to transcranial magnetic stimulation (TMS); i.e. motor evoked potential, intracortical facilitation, motor threshold, short-interval intracortical inhibition, and silent period) were included. Study quality was assessed using Joanna Briggs Institute criteria and evidence certainty using GRADE. Meta-analysis was performed using RevMan inverse variance, mixed-effect models.

Results Eighteen studies were included, all deemed low-quality. Quadriceps voluntary activation was impaired with knee osteoarthritis compared to healthy controls (standardised mean difference [SMD]=-0.84, 95%CI=-1.12-0.56, low certainty). Voluntary activation of the more symptomatic limb was impaired (SMD= 0.42, 95%CI= -0.75-0.09, moderate certainty).