SAT0731-HPR EARLY POSTOPERATIVE OUTCOMES OF UNILATERAL VERSUS BILATERAL TOTAL KNEE ARTHROPLASTY

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Background: Many patients in need of total knee arthroplasty (TKA) have bilateral symptoms and require surgery to both extremities. Performance of a bilateral procedure under a single anaesthetic provides a reduced hospitalisation time, an isolated anaesthesia risk, a single rehabilitation, and substantial cost savings. However, previous studies' reports vary from unilateral TKA producing better outcomes than bilateral TKA, the 2 procedures producing no significant difference, and bilateral TKA producing a better outcome than unilateral TKA. There is a need for new studies to examine the differences between unilateral and bilateral TKA in terms of the early postoperative outcomes.

Objectives: The aim of this study was to compare the effect of the unilateral and bilateral TKA on the early postoperative outcomes.

Methods: The study group consisted of 71 patients (106 knees), who underwent primary TKR because of arthrosis were stratified either unilateral or bilateral TKA status. The mean age of unilateral (n=36) subjects were 66.00±10.71 years, and the mean age of bilateral (n=35) subjects were 64.17±7.61 years. Patients were evaluated regarding the knee function score (Hospital for Special Surgery (HSS) score), pain (Numeric Pain Rating Scale (NPRS)), knee range of motion, length of hospital stay, the day of active straight leg raise, the day of knee flexion angle achieved 70 degrees, quality of life (Short-Form 12 Health Survey (SF-12)). Functional activities were evaluated using the Iowa Level of Assistance Scale and walking speed was evaluated using the Iowa Ambulation Velocity Scale. Patients were evaluated preoperatively and at discharge. All patients underwent the same rehabilitation program.

Results: At baseline, demographic and anthropometric characteristics were similar in groups and there was no statistically difference between groups (p>0.05). When the patients' knee range of motion were compared, there were statistically differences (p=0.027) between groups after surgery. The unilateral group had better results in terms of postoperative knee flexion degree. There were no statistical differences in terms of the pain degree, HSS score, length of hospital stay, the day of active straight leg raise, the day of knee flexion angle achieved 70 degrees, IOWA help level and IOWA walking speed, SF-12 score between groups before and after TKA (p>0.05).

Conclusions: According to our results, the unilateral group had better result in term of postoperative knee flexion degree. On the other hand, the bilateral method may provide an advantage in terms of a single rehabilitation, and substantial cost savings. Therefore, in this comparison to obtain more comprehensive results studies on larger series are needed. In this way, a more uniform and objective data can be achieved.

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SAT0732-HPR RATING OF PERCEIVED EXERTION IN PATIENTS WITH RHEUMATOID ARTHRITIS – WHICH ARE THE CORRELATES?

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Background: People with rheumatoid arthritis (RA) are recommended to participate in physical activity to improve or maintain their health. The intensity of the physical activity is important to gain the health benefits. One way for the individual to monitor the intensity of physical activity is to use the Borg scale for rating of perceived exertion (RPE), which is claimed to be strongly correlated to heart rate (HR). While this is true for healthy individuals, RPE in people with RA might however be influenced by a range of additional factors.

Objectives: To analyse correlates of RPE assessed at the end of an aerobic capacity test in patients with RA.

Methods: Data from 192 people with RA participating in the PARA 2010 study were analysed. Their mean age was 59 years (SD 9.7), 159 (83%) were women, mean disease duration was 12 years (SD 9.4), mean DAS28 score was 2.95 (SD 1.25) and median Health Assessment Questionnaire (HAQ) score 0.375 (range 0–1.875). Submaximal tests of aerobic capacity on bicycle ergometers were performed according to the Åstrand protocol and perceived exertion was rated on the Borg RPE scale.^{6–20} Data on the potential correlates pain (VAS, 0–100), fatigue (VAS, 0–100), general health perception (GHP, VAS, 0–100), lower extremity function (Timed Stands Test, TST, s), healthy physical activity levels (yes/no),

activity limitation (HAQ, 0–3), fear avoidance beliefs (Fear avoidance beliefs questionnaire, FABQ, 0–24), exercise self-efficacy (Exercise Self Efficacy Scale, ESES, 6–60), and depression (EQ5D, question # 5, 1–3) were collected. Generalised linear models (GLM) with normal log models were used to calculate each variable's correlation with the RPE. Correlates with p-value<0.10 were entered in a forward stepwise model.

Results: The correlation between RPE and working HR at the end of the aerobic capacity test was $r_s=0.15$ (p<0.05). Analysis using GLM identified general health perception, lower extremity function, activity limitation, depression, resting HR and working HR as correlates of RPE with p-value<0.10. A forward stepwise model including these variables, together with age and gender, identified lower extremity function (OR: 1.0044/s, p=0.0001), resting HR (OR: 0.9977/beat, p=0.0071) and working HR (OR: 1.0030/beat, p<0.0000) as correlates of RPE.

Conclusions: As expected, RPE correlated with working HR, but only weakly. Although our study participants were instructed to focus on perceived central exertion in their ratings, it seems that they were not able to distinguish that from peripheral exertion. Considering this bias in ratings, wearable HR monitors should be recommended to people with RA for accurate feedback on physical activity intensity.

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SAT0733-HPR DUTCH RECOMMENDATIONS FOR PHYSICAL THERAPY IN AXIAL SPONDYLOARTHRITIS (AXSPA)

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Background: According to the ASAS/EULAR recommendations, physical therapy (PT), especially exercise therapy, is an essential element within the management of axSpA.¹ In the Netherlands considerable variation in the delivery of PT was observed,² suggesting suboptimal care delivery. This practice variation is likely to be related to the lack of specific recommendations regarding referral, assessment, content, and monitoring of its effectiveness and safety.

Objectives: To develop practice recommendations on PT in axSpA.

Methods: A taskforce of 31 experts was responsible for the recommendations. It consisted of patients,² rheumatologists,⁷ physical therapists,¹³ policy makers,³ researchers² and representatives of patient organisations.⁴ These were based on scientific evidence, expert opinion and patient values and were formulated following a combination of literature review and three expert-group meetings. Clinical questions were formulated in the first expert-group meeting. Then, a systematic literature review was performed to answer the clinical questions. It focused on systematic reviews, meta-analyses and (inter)national guidelines recommendations and consensus statements published after 2010 in English or Dutch. When this approach did not yield sufficient information, relevant RCTs or other types of research designs addressing (one of) the clinical questions were selected. Subsequently, draft recommendations based on the literature, expert opinion and patient values were formulated and discussed in a second meeting. In the third expert group meeting the recommendations were finalised and the level of agreement was determined by a written voting (rating from 1 (total disagreement) to 10 (total agreement)). We defined agreement if at least 80% voted ≥8.

Results: In the first meeting 18 clinical questions were formulated. Six questions pertaining to the content and safety of PT were merged and integrated. In total 12 practice recommendations were formulated on indication,² referral,² assessment/monitoring,² treatment,⁵ reporting¹ and safety.² (Figure 1) Three recommendations were (partly) based on level 1 evidence (Dutch Evidence Based guidelines, EBRO); others were based on lower levels combined with the opinion of experts written in literature. Agreement was reached for 11 out of 12 recommendations. Mean levels of agreement were high and varied between 8.5–9.1.