

according to COSMIN guidelines. There is an urgent need in musculoskeletal research for condition-specific PROMs developed with adequate methods.

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### NO CORRELATION BETWEEN PERFORMANCE TESTS, CLINICAL MEASUREMENTS AND PATIENT REPORTED OUTCOME MEASURES (PROM) IN CHILDREN WITH ANTERIOR CRUCIATE LIGAMENT INJURY

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**Introduction** The outcome following operative or non-operative treatment of ACL injuries in children is traditionally assessed by patient reported outcome measures (PROMs), functional performance tests and clinical measurements (e.g. instrumented laxity). However, there is little evidence as to whether these different types of outcome are complementary to evaluate the condition, or if each outcome is representative for how the child is doing.

**Materials and Methods** A consecutive group of children (defined as < 16 years old) who had an ACL-reconstruction, were prospectively followed and assessed after 1-year with Pedi-IKDC and KOOS-Child, instrumented laxity measurement, range of motion, extension strength and four performance tests. By partial correlation coefficient analysis, controlling for age, height and weight, correlations between the different outcomes were calculated.

**Results** In the group of 163 children, 141 had all assessments necessary for the analysis. There were weak to strong correlations between the scores from Pedi-IKDC and the scores from each of the 5 domains of KOOS-Child and a weak to moderate correlation between the different domains of KOOS-Child. Similar correlations were found between the different performance tests. There were only few positive and weak correlations between performance tests and PROMS and between clinical measurements and PROMS.

**Conclusion** For children who had their ACL reconstructed there was no clinically important correlation between scores obtained by PROMs, a battery of functional performance tests and instrumented laxity of the knee at 1-year follow-up post-operatively. This is an argument for always to include and report all three types of outcomes.

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### DANISH VERSION OF THE WESTERN ONTARIO MENISCAL EVALUATION TOOL (WOMET): A CROSSCULTURAL ADAPTATION, TEST-RETEST RELIABILITY AND RESPONSIVENESS STUDY

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**Introduction** The Western Ontario Meniscal Evaluation Tool (WOMET) is designed to evaluate Health Related Quality of Life (HRQOL) in patients with meniscal injuries. The purpose of this study was to translate and crossculturally adapt the WOMET for use in Danish and evaluate its reliability and responsiveness.

**Materials and Methods** The WOMET was forward and backward translated into Danish according to international guidelines. 60 patients (mean age 49 years (range 19–71 years), 57% females) with meniscal injury scheduled for arthroscopy meniscal surgery in the period from September 2017 to February 2018, were included in this study. The WOMET was completed at baseline, 3- and 6-months post-surgery. Additionally, test-retest reliability was assessed at 3-months in 55 patients with stable symptom state from test to retest. Responsiveness was assessed between the WOMET and The Knee injury and Osteoarthritis Outcome Score (KOOS4 – aggregate of 4 of 5 KOOS-subcales).

**Results** The Danish version of the WOMET was successfully translated and showed good face validity. Test-retest reliability was excellent, with Intra Class Correlation (ICC) of 0.88 (95%CI 0.84–0.92) for the total score. The Standard Error of Measurement (SEM) was 125 points and the Minimal Detectable Change (MDC) was 347 points (7.8% and 21.7% of the total score, respectively). The WOMET had good responsiveness with an effect size (ES) of 1.12 at 6 months post-surgery, which was comparable to the KOOS4 (ES 1.10).

**Conclusion** The Danish version of the WOMET is reliable and responsive for assessing health-related quality of life in patients with meniscal pathology.

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### GRAFT FAILURE, REVISION ACLR, AND REOPERATION RATES AFTER ACLR WITH QUADRICEPS TENDON VERSUS HAMSTRING TENDON AUTOGRAFTS

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**Introduction** It has been indicated that anterior cruciate ligament reconstruction (ACLR) with a quadriceps tendon (QT) graft has a higher risk of revision compared with ACLR performed with a hamstring tendon (HT) graft.

**Materials and Methods** This was a registry study with review of medical records of patients who underwent primary ACLR with either QT or HT graft performed at Copenhagen University Hospital Hvidovre. The cohort was identified from the Danish Knee Ligament Reconstruction Registry and linked to the Danish National Patient Registry to identify all hospital contacts after ACLR. The outcome variables were graft failure (rerupture or >3-mm side-to-side difference in anteroposterior [AP] laxity), revision ACLR, reoperation due to cyclops lesion, reoperation due to meniscal injury, and reoperation due to any reason. AP laxity and pivot shift were assessed at 1 year.

**Results** A total of 475 patients (252 HT, 223 QT) were included. The rate of graft failure at 2 years was 9.4% for the QT group and 11.1% for the HT group (P=.46). For the QT and HT groups, respectively, the rate of revision ACLR was 2.3% and 1.6% (P=.60), the rate of reoperation due to cyclops lesion was 5.0% and 2.4% (P=.13), and the rate of reoperation due to meniscal injury was 4.3% and 7.1%

( $P=.16$ ). The rate of reoperation due to any reason was 20.5% and 23.6% ( $P=.37$ ).

**Conclusion** QT and HT grafts yielded similar rates of graft failure, revision ACLR, and reoperation at 2 years of follow-up after ACLR.

193 **CAN WE PREDICT THE OUTCOME FOR RECOVERY OF PLANTAR HEEL PAIN? AN INTERNATIONAL PROSPECTIVE COHORT STUDY**

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**Background** Plantar heel pain (PHP) is a debilitating musculoskeletal condition from which only 65–75% recover within a year. Treatment has unsatisfactory results, partially due to poor understanding of PHP prognosis.

**Methods** We carried out a prospective cohort study with 1 year follow-up. 136 patients were recruited from five different countries using a validated and reliable online questionnaire battery that included 5-demographic, 13-biomedical, 8-psychological, 3-social and 8-activity-related factors. Kaplan-Meier

survival estimates were used to estimate prognosis, and a multiple Cox-regression was used for the prediction model.

**Results** The survival analyses revealed that risk of having PHP was 97.1% after 3 months, 80.8% after 6 months and 52.5% 1 year from study entry. The risk was significantly greater for those with poor general foot health (HR: 1.02, 95% CI= 1.00–1.02), longer symptom duration (HR: 0.84, 95% CI= 0.64–0.91), not-having injection (HR: 2.61, 95% CI= 1.29–8.96) and believing to get worse in the future (HR: 1.69, 95% CI= 1.35–3.47) at baseline. The model provided accurate prediction of overall recovery (C-statistic 0.68; 95% CI 0.66–0.79) for PHP with acceptable discrimination and calibration.

**Conclusion** Patients with long duration symptoms who have poor foot health and negative future beliefs have a poorer prognosis, irrespective of demographic variables. When recommending interventions to patients, clinicians should consider patients' conditions from broad psychosocial and biomedical perspectives. Importantly, PHP is not a self-limiting condition as previously claimed. Strategies designed to prevent chronicity may optimise prognosis. This is the first study to provide robust prognostic evidence about biopsychosocial factors for PHP.