when adolescents were instructed to modify sports participation. Data was only included if they had a valid week which consisted of at least 4 days with 10 hours of wear-time. Time spent in consecutive sedentary bouts of ≥10 minutes was used to calculate the average daily sedentary time.

Results Baseline sedentary time for adolescents with PFP and OSD were 344 (±74) and 349 (±39) min/day, respectively. For adolescents with PFP the mean change in sedentary time was 14 min/day (95% CI, -3 to 30min) and 8 min/day (95% CI, -7 to 24) for OSD during activity modification.

Conclusion A management strategy focusing on activity modification, education, and exercises was associated with none or only small changes in sedentary time.

92 GOOD SHORT-TERM EFFECT OF SELF-MANAGEMENT REHABILITATION IS ASSOCIATED WITH LONG-TERM SUCCESSFUL OUTCOME IN ADOLESCENTS WITH PATELLOFEMORAL PAIN AND OSGOOD-SCHLATTER

1,2Michael Skovdal Rathleff*, 3Kristian Thorborg, 2Alessandro Andreucci, 1Henrik Riel.
1Department of Health Science and Technology, Aalborg University, Denmark; 2Center for General Practice at Aalborg University, Aalborg University, Denmark; 3Sports Orthopaedic Research Center – Copenhagen (SORC-C), Department of Orthopaedic Surgery, Aarhus Hvidovre Hospital, Institute for Clinical Medicine, Copenhagen University, Denmark

Introduction Short-term self-reported changes may be more strongly associated with long-term prognosis as they describe a disease trajectory and not a state. This study aimed to investigate the association between Global Rating of Change (GROC) after 4 weeks and the outcome after 12 months among adolescents with non-traumatic knee pain (Patellofemoral Pain (PFP) or Osgood-Schlatter (OSD)).

Material and Methods We included data from two prospective clinical trials including adolescents (aged 10–14 years) with PFP (N=151) or OSD (N=51) who underwent a self-management rehabilitation programme including education and exercise. Primary outcome was a 7-point GROC ranging from much improved to much worse. Adolescents were considered to have a successful outcome if they reported being much improved or improved. Outcomes were collected after 4 weeks and 12 months.

Results Among adolescents with an unsuccessful outcome after 4 weeks (58% of all adolescents), 78% had a successful outcome after 12 months. Among those with a successful outcome after 4 weeks (42% of all adolescents), 94% had a successful outcome after 12 months. Having a successful outcome after 4 weeks increased the relative risk of a successful outcome after 12 months (relative risk 1.21 (95%CI: 1.07–1.38) and absolute risk difference: 16%).

Conclusion Self-reported improvement after 4-weeks of treatment is associated with better outcomes after 12 months. Importantly, despite no improvement after 4 weeks, a large proportion of adolescents between 10 and 14 years of age will report improvement after 12 months. This highlights the importance of following the rehabilitation programme irrespective of short-term improvements.
Delayed Loading Following Repair of Ruptured Achilles Tendon – A Randomized Controlled Trial

Introduction The optimal rehabilitation following Achilles tendon rupture is still missing. It has been suggested that preventing tendon elongation during rehabilitation improves the clinical outcome, which leads to the purpose of this study; investigating if delayed loading following surgical treated Achilles tendon rupture influences the clinical outcome, muscle and tendon structure at one year.

Material and Methods Single-blinded prospective randomized controlled trial.

Group A (n=24); standard treatment with partial weight-bearing from week 3, full weight-bearing from week 7, and a bracing time of 6 weeks. Group B (n=24) with no partial weight-bearing until week 7, full weight-bearing from week 13, and a bracing time of 12 weeks. Tendon and muscle morphology were investigated with MRI and ultrasound at 1 week, 3, 6 and 12 months.

Results Primary outcome was heel-rise height deficit on the injured side relative to the uninjured side at one-year follow-up. Mean diff. A = 2.2 cm, B= 2.1 cm, p= 0.72. No difference was found between the two groups regarding the primary and the following secondary outcomes. An elongation of the free tendon was already seen at 1 week (17.8 mm. p<0.0001) and remained at 12 months (21.3 mm). Fascicle length of the gastrocnemius medialis muscle was reduced by 4.0 mm p<0.001 after 1 year. The mean Achilles Tendon Total Rupture Score was 65.9 at 1 year. The remaining secondary outcomes are being processed.

Conclusion Delaying the loading did not improve the heel-rise performance one year after Achilles tendon repair compared to standard treatment.

PATIENT-REPORTED, CLINICAL AND RADIOLOGICAL FACTORS ASSOCIATED WITH THE RESULT AFTER NON-SURGICAL MANAGEMENT OF ACUTE AC JOINT DISLOCATIONS

Background The treatment of Rockwood type III/V acromioclavicular(AC) joint dislocations is debated. The objective of this prospective cohort study was to investigate the association between demographical, clinical, patient-reported and radiological variables at baseline/6w with the result after 3m, 6m and 1y.

Methods Inclusion criteria were patients aged 18–60 with acute AC joint dislocation and >50% superior displacement of the clavicle. Patients were treated non-surgically with 3m of home-based training and the option of delayed surgical intervention.

The primary outcome was the Western Ontario Shoulder Instability Index(WOSI). Secondary outcome was surgery yes/no. Patients were evaluated at baseline and 6w, 3m, 6m and 1y after the injury. Demographical, clinical, patient-reported and radiological variables were investigated for association with the outcomes. A model to identify patients at risk of surgery was suggested.

Results Ninety-five patients with Rockwood type III/V AC joint dislocation were included. Pre-injury participation in overhead/collision sports and reduced range of motion (ROM) at baseline were associated with reduced WOSI and increased risk of surgery. At 6w, reduced ROM, reduced WOSI and increased SPADI were associated with the outcomes. Radiological measurements were not associated with the result.

At 6w, all patients eventually requiring surgery could be detected with a sensitivity of 100% and a specificity of 94% based on a SPADI score>30 and a ROM<=140 degrees in flexion/abduction.

Conclusion ROM was the only factor consistently associated with both WOSI and risk of surgery. Six weeks after the injury, patients in need of surgery could be detected based on ROM and SPADI.