Abstracts

Results Overall, boys had significantly higher valgus KFM values than girls across both data collections (P=0.001). Also, a significant interaction between sex and age was observed, where girls and boys demonstrated respectively an increase and decrease in the valgus KFM values from pre-adolescence to adolescence age (13.8% increase vs. 10.6% decrease; P=0.001).

Conclusion The remarkable increase of KFM in adolescent athlete girls may, in part, play a role in their risk of ACL injury, although future studies need to assess the relationship between this increase and rate of ACL injuries.

20 PATIENTS’ LIVED EXPERIENCES OF KNEE INJURY TREATMENT USING INTEGRATED PSYCHOLOGICAL TRAINING OR CARE-AS-USUAL: A PHENOMENOLOGICAL INTERVIEW STUDY

Niklas Cederström*, Eva Ageberg, Simon Grenér. 1Department of Health Sciences, Lund University, Margaretavägen 1B, Sweden; 2Department of Psychology, Lund University, Alfhelgonan Kyrkogata 16a, Sweden

Introduction Despite recent literature recommending increased focus on psychological aspects of rehabilitation, injured athletes often do not return to sport despite having reached physical readiness. The aim of this study was to explore the lived experiences of patients undergoing treatment for knee injury according to either the novel Motor Imagery to Facilitate Sensorimotor Re-learning (MOTIFS) training model, which integrates psychological training into physical rehabilitation, or care-as-usual.

Materials and Methods This phenomenological interview study identified major and subordinate themes encompassing the lived experiences of rehabilitation of 5 patients undergoing MOTIFS training and 7 receiving care-as-usual.

Results Results indicated that patients in the MOTIFS group perceived increased focus on individualized and activity-relevant meaning during rehabilitation training. This included concrete strategies to influence psychological outcomes, and identifying an explicit biopsychosocial interaction in which confidence, motivation, and enjoyment encouraged both physical and psychological readiness to return to sport.

Patients in the care-as-usual group perceived focus on physical aspects of training. The complexity of the biopsychosocial interaction was not articulated, though the lack of structured psychological training strategies was perceived to have a negative influence on feeling psychologically ready to return to sport.

Conclusion Those in the MOTIFS group described this novel training model as focusing on understanding and providing strategies for coping with psychological factors in rehabilitation and subsequent return to sport. The care-as-usual group perceived a need for more focus on improving psychological well-being. Future research should focus on methods of improving both physical and psychological readiness to return to sport.

25 STRENGTH, FUNCTION AND OVERALL HEALTH BEFORE AND AFTER SURGICAL OR CONSERVATIVE TREATMENT OF PROXIMAL HAMSTRING AVULSION

Kasper Sporresdorfs, Jens Ole Storm, Marie Bagger Bohn, Bent Lund, Signe Kerkesgaard-Buchner. 1Department of Physio and Occupational Therapy, Horsens Regional Hospital, Sundvej 30, Denmark; 2Department of Orthopedic Surgery, Horsens Regional Hospital, Sundvej 30, Denmark

Introduction Proximal Hamstring Avulsion (PHA) is a rare injury and happens with hyperextended knee and hyperflexed hip.

Materials and Methods The aim of the study was to investigate the effect of surgical and conservative treatment of PHA.

Patients with MRI-verified PHA were included and had either surgery or training. At baseline, at 6 and 12 months follow-up, all patients answered Perth Hamstring Assessment Tool (PHAT), Hip Sports Activity Scale (HSAS), overall-health Visual Analog scale and had their knee flexion strength measured at 30 degrees using handheld dynamometer.

Results 13 patients had surgery (mean age 51±15, 46% females, 15 days after injury) and 13 patients had training (mean age 50±17, 46% females, 64 days after injury). In the surgical group, the median PHAT score increased from 41 to 70 to 82 (p<0.001), their overall health: 50 to 80 to 80 (p=0.025) and their HSAS: 0 to 3 to 3 (p<0.01). In the training group, the PHAT score increased from 51 to 68 to 77 (p<0.001). Overall health improved from 69 to 75 to 80 (p=0.025), while HSAS went from 1 to 1 to 1 (p<0.01). Median knee strength improved in the surgical group from 0.22 to 0.67 to 1.07 Nm/kg (<0.001) and in the training group from 0.24 to 0.44 to 0.48 Nm/kg (<0.001).

Conclusion At 12 months follow-up, both groups improved PHAT and overall health. However, the surgical group improved more in knee flexion strength and were able to participate in sports at a higher level than the training group.

26 COMBINED HORMONAL CONTRACEPTIVE USE IS NOT PROTECTIVE AGAINST MUSCULOSKELETAL CONDITIONS OR INJURIES: A SYSTEMATIC REVIEW WITH DATA FROM 5-MILLION WOMEN

Justin M Losciame, Lynita White, Kipling Squier, Charlotte Beck, Sarah Guy, Alex Scott, Jeriynn C Prior, Jackie Whittaker*. 1Department of Physical Therapy, University Of British Columbia, Canada; 2Arthritis Research Canada, Canada; 3Tall Tree Physiotherapy and Health Centre, Canada; 4Centre for Hip Health and Mobility, University of British Columbia, Canada; 5Woodward Library, University of British Columbia, Canada; 6City Sport + Physiotherapy Clinic, Canada; 7Centre for Menstral Cycle and Ovulation Research, University of British Columbia, Canada

Introduction Half of young women start combined hormonal contraceptive (CHC) use for non-contraceptive reasons including ‘controlling’ their menstrual cycle to prevent injuries. These decisions should be evidence-based. This study assessed the association between CHC use and musculoskeletal tissue pathophysiology, injuries, or conditions.