symptom state (PASS) threshold were compared with one-way analysis of covariance (adjusted for sex, age, time to surgery, and cartilage/meniscus injury at ACLR) or chi-square tests ($\alpha=0.05$).

**Results** Eighty-three (83%) and 1477 (53%) patients attended the 10-year follow-up. Patients who received progressive preoperative and postoperative rehabilitation had superior outcomes for KOOS pain, symptoms, activities of daily living, sports and recreation compared with usual care ($p<.001$), with the largest difference in sports and recreation (13±6 points). A greater proportion also exceeded the PASS-threshold compared to patients who received usual care (53–97% versus 38–83%, $p<.003$).

**Conclusion** Ten years after ACLR, patients who received progressive preoperative and postoperative rehabilitation had better knee function and symptoms, and a greater proportion achieved acceptable symptoms compared to patients who underwent usual care.

**PRONOUNCED QUADRICEPS WEAKNESS WITH QUADRICEPS TENDON GRAFT COMPARED TO PATELLAR OR HAMSTRING TENDON GRAFT FOR ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION**

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**Introduction** Impaired quadriceps muscle function following ACL reconstruction (ACLR) is associated with worse clinical outcomes and risk of re-injury. Yet, we know very little about quadriceps muscle function in patients reconstructed with quadriceps tendons (QT), a graft with increasing popularity worldwide. The purpose of this study was to describe and compare isokinetic quadriceps strength in patients undergoing ACLR with QT, hamstrings tendon (HT) or patellar tendon (BPTB) autograft.

**Materials and Methods** In this cross-sectional study we included QT-patients (n=104) and matched them to BPTB (n=104) and HT-patients (n=104) according to age, gender, and associated meniscus surgeries (Mean time from ACLR [SD]: 7 months [1]). Data were collected through clinical follow up routines and the Swedish ACL registry. Isokinetic strength was measured at 90°/seconds and expressed through leg symmetry index (LSI). Group differences were assessed by analysis of variance with post-hoc pair wise comparison.

**Results** QT patients had significantly lower peak knee extension torque than BPTB. (Mean LSI difference [95%CI]: -6.9% [-11.2 to -2.7], $p = .001$) and HT-patients (Mean LSI difference [95%CI]: -17.4% [-21.7 to -13.2], $p = .001$). None of the graft groups reached a mean LSI in peak knee extension torque of >90% (Mean LSI [95%CI]: QT = 67.5% [64.8–70.1]; BPTB = 74.4% [72–76.9]; HT = 84.9% [82.4–87.4]).

**Conclusion** Seven months following ACLR, patients operated with QT-grafts present with significantly worse isokinetic quadriceps strength than patients operated with BPTB and HT grafts. None of the three groups reached an LSI of >90% in quadriceps strength.

**USING BIOMECHANICS TO ASSESS THE COUNTERMOVEMENT JUMP AS A TOOL TO MEASURE MALE AND FEMALE ADOLESCENTS WITH ACL INJURY**

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**Introduction** Adolescent anterior cruciate ligament (ACL) injuries have increased substantially over the last two decades and some 25% will experience a re-injury following surgery, with injury rates highest among females. As such, improved return to activity metrics are imperative. Vertical jump performance is a commonly used tool, however performance standards and the role of the injured or non-injured limb in achieving jump height is unknown for adolescent males and females. As such, the purpose of this study was to (1) assess performance in ACL injured and uninjured adolescents, and (2) assess limb contributions to this performance.

**Materials and Methods** Thirty-one ACL injured and thirty-eight control female adolescents, and fifteen ACL injured and twenty-five control male adolescents performed a counter-movement jump (CMJ) task while whole body 3D kinematics were recorded. Maximum jump height and the maximum sagittal hip, knee, and ankle velocities were calculated. Females and males were analysed separately, while contrasts were made between limbs and injury status.

**Results** Jump height was 13% lower in the ACLi compared to CON, while the ACLi contralateral limb also produced greater hip, knee and ankle angular velocities compared to their injured limb in females. No difference was found in jump height between ACLi and CON, however the contralateral limb of the ACLi males had greater hip and knee extension angular velocities. Neither male nor female controls had inter-limb differences.

**Conclusion** ACLi adolescents shielded the injured limb to achieve similar jump performance. This leads to asymmetrical joint loading and may explain injury risk.

**READYTOPLAY: INJURY AND ILLNESS SURVEILLANCE IN WOMEN’S PREMIER LEAGUE FOOTBALL IN NORWAY – A 2-YEAR PROSPECTIVE COHORT STUDY**

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**Introduction** Previous epidemiological studies in women’s football have used methods inappropriate to capture overuse injuries and illnesses. The aim of this study was to describe
the injury and illness patterns in women’s premier league football.

Materials and Methods During the 2020 and 2021 seasons players in the women’s premier football league in Norway reported all health problems (acute injuries, overuse injuries and illnesses) weekly, using the Oslo Sports Trauma Research Centre Questionnaire on Health Problems. We calculated incidence, average weekly prevalence, and burden (the cross-product of incidence and severity) of all health problems reported.

Results We included 294 female football players (22±4 years, range: 16–37) in the study. The average response rate to the weekly questionnaire was 79% (SD: ±9%). On average, 32% (95% CI, 31% to 33%) of the players reported at least one health problem at any time and 22% (95% CI, 21% to 23%) reported a health problem negatively affecting their training volume or performance. Acute injuries caused the greatest burden of all health problems (68% of the total burden), followed by overuse injuries (25%) and illness (8%). Thigh was the most common injury location (n=143, 26%) of all cases), but knee injuries caused the greatest time-loss (42% of total time-loss).

Conclusion One in five players in the women’s premier league in Norway had a health problem negatively affecting their training volume or performance at any time. Acute injuries represented the most burdensome health problem. Thigh injuries were most frequent while knee injuries caused the greatest time-loss.

Introduction The primary aim of this study was to describe the clinical entities and imaging characteristics of groin injuries in women’s football.

Materials and Methods During the 2020 and 2021 seasons, players in the Norwegian women’s premier football league reported groin injuries weekly, using the Oslo Sports Trauma Research Center Questionnaire on Health Problems. The team physical therapist (PT) classified the athlete-reported injuries using a standardized examination form. Injuries with more than 3 days’ time-loss or reported in 2 consecutive weeks were eligible for magnetic resonance imaging (MRI), applied to describe the injury characteristics.

Results The PTs examined 66 of 126 athlete-reported groin injuries (52%). Thirty-nine (59%) of the PT-examined injuries were classified as adductor-related, 10 (15%) iliopsoas-related, 6 (9%) in rectus femoris, 4 (6%) pubic-related, 4 (6%) hip-related, 2 (3%) inguinal-related, and one (2%) other. Rectus femoris injuries caused the greatest time-loss (median: 15 days, IQR: 6–26), followed by pubic-related injuries (median: 14 days, IQR: 1–91). Of the 55 injuries meeting MRI criteria, 42 (76%) were investigated with MRI. Of the injuries examined by MRI we found no findings in 8 cases (19%), acute injury findings in 6 cases (14%) and chronic findings in 29 cases (69%). The most common acute and chronic findings were in the proximal rectus femoris (n=4) and symphysial joint surface irregularities or subchondral cysts (n=7), respectively.

Conclusion Adductor-related groin injuries were the most common, and injuries to the rectus femoris caused the greatest time-loss. The majority of MRI examinations demonstrated chronic findings.

Introduction Patellofemoral pain (PFP) is one of the most common knee conditions across the lifespan. An essential question from patients is “what is the expected course/outcome”? Currently, there are no comprehensive syntheses of current evidence to inform clinical practice on prognosis for those living with PFP. This systematic review aims to investigate the long-term (defined as ≥ 12 months) prognosis of knee pain and knee function in adults and adolescents with PFP.

Materials and Methods A systematic search was performed in PubMed, EMBase, the Cochrane Central Register of Controlled Trials (CENTRAL), Web of Science, OpenGrey.eu. This was supplemented with a hand search, including recent International Patellofemoral Research Retreat abstracts. Prospective studies investigating long-term prognosis (≥12 months) in people with PFP aged < 40 years were included. Retrospective studies and studies with < 20 participants were excluded. Identified studies were screened and data was extracted on knee pain and self-reported knee function (all done by at least two independent reviewers). The systematic review was pre-registered on OSF.io (DOI: 10.17605/OSF.IO/WD4T3).

Results 17723 records were identified. After removal of duplicates 12203 were screened with 183 studies assessed by full text for eligibility. 66 studies were included. Of these, 15 were randomised control trials and 51 were prospective cohort studies.

Conclusion We will present the results for the long-term prognosis for people living with PFP at the Sportskongres 2022. Our results will provide clinicians and patients with a potential answer to one of the most frequently asked questions.