**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.
Materials and Methods After protocol registration, five databases were searched to 04–2022. Intervention and cohort studies assessing the association between new or ongoing use of CHC and musculoskeletal tissue pathophysiology, injury, or condition outcome in post-pubertal women were included. Record screening, data extraction, and risk-of-bias assessment were duplicated (blinded). Meta-analyses were not possible. Semi-quantitative syntheses followed a modified GRADE approach.

Results Across 50 included studies, we assessed the effect of CHC use on 30 unique outcomes (75% bone-related). Serious risk-of-bias was judged present in 82% of studies, with 52% adequately adjusting for confounding. Meta-analyses were not possible due to heterogeneity in outcome methods, estimate statistics, and comparison conditions. Based on semi-quantitative synthesis, there is low certainty evidence that CHC use is associated with higher future fracture risk (RR 1.02–1.20), and total knee arthroplasty (RR 1.00–1.36). There is very low certainty evidence of unclear relationships between CHC use and a wide range of bone health outcomes. Evidence about the effect of CHC use on musculoskeletal tissues beyond bone, and the influence of use in adolescence versus adulthood is limited.

Conclusion Given a paucity of high-certainty evidence that CHC use is protective against musculoskeletal pathophysiology, injury, or conditions, it is premature and inappropriate to prescribe CHC for these purposes.

KNEE-RELATED QUALITY-OF-LIFE, SYMPTOMS, PAIN, AND FUNCTION IN SPORTS/RECREATIONAL ACTIVITIES IN ADULTS WITH A HISTORY OF ADOLESCENT OSGOOD-SCHLATTER: A CROSS-SECTIONAL STUDY

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Background Osgood-Schlatter is a common growth-related condition in adolescence and can cause persistent symptoms and decrease quality of life. However, little is known about its long-term consequences for knee-related health in adulthood.

Aim To investigate self-reported knee health of adults diagnosed with Osgood-Schlatter during adolescence compared to data from healthy age-matched populations.

Methods We invited all (n=1218) patients aged 18–55y, diagnosed in secondary care with Osgood-Schlatter during 1977–2020, who were invited to complete a web-based survey. Knee-related health was self-reported on the Knee Injury and Osteoarthritis Outcome Score (KOOS) on subscales: Quality-of-Life (QoL), Symptoms, Pain, and Sport/Rec. Responses were grouped according to pre-specified age groups (18–25, 26–35, 36–45, 46–55 years) and compared using a two-tailed students t-test, to age-matched KOOS values derived from a healthy cohort (Williamson AJSM 2015, n=1000).

Results 400 participants completed the survey (mean age 33.8 ±13y, 65% men). All mean subscale scores were lower for the surveyed group compared to the healthy cohort (p<0.001). Mean differences between the two groups were (female: male): QoL subscale: 36/19 points (18–25y), 25/27 points (26–35y), 26/33 points (36–45y), 25/23 points (46–55y); Symptom subscale: 15/8 points (18–25y), 8/9 points (26–35y), 18/11 points (36–45y), 10/11 points (46–55y); Pain subscale: 19/9 points (18–25y), 11/12 points (26–35y), 13/15 points (36–45y), 16/10 points (46–55y); Sport/Rec subscale: 36/19 points (18–25y), 30/28 points (26–35y), 38/31 points (36–45y), 33/26 points (46–55y).

Conclusion People diagnosed with Osgood-Schlatter in adolescence have significantly decreased self-reported knee health in adulthood when compared to healthy populations. Future studies should address potential long-term consequences of this condition.

DECLINING TRENDS IN ARTHROSCOPIC MENISCUS SURGERY AND OTHER ARTHROSCOPIC KNEE PROCEDURES IN DENMARK: A NATIONWIDE REGISTER-BASED STUDY

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Introduction A doubling of arthroscopic meniscal procedures was observed in Denmark from 2000 to 2011, but arthroscopic meniscal procedures for degenerative meniscal tears are no longer recommended. We performed an updated investigation of Danish meniscal procedure trends in the private and public healthcare sectors in Denmark from 2006 to 2018, including trends for other arthroscopic knee procedures.

Materials and Methods Data on the five most commonly registered arthroscopic knee procedures were extracted from the Danish National Patient Register from January 1st 2006 to December 31st 2018, and linked with the Danish Population Statistic Register from Statistics Denmark to obtain data on age and sex.

Results A total of 414,253 arthroscopic knee procedures were registered during 315,290 surgeries on 244,113 individual patients in the study period. For arthroscopic meniscal procedures, the highest incidence rate was observed in 2010 (319 per 10^5 persons/year, CI95% 314 to 323) and the lowest in 2018 (173 per 10^5 persons/year, CI95% 169 to 176), corresponding to relative decrease of 46% from 2010 to 2018. Remaining arthroscopic procedures also showed declining trends, with lowest incidence for all procedures in 2018.

Conclusions A large decrease in the incidence for arthroscopic meniscal procedures was observed from 2010 to 2018, possibly in response to mounting evidence of limited benefit of this procedure for degenerative knee disease. All other investigated arthroscopic knee procedures also declined in the same period.