

ABSTRACT

The main objective of this bachelor thesis is to find out in adolescent ice hockey players whether the pain of patellofemoral articulation is caused by muscle dysbalance, especially by the weakening of vastus medialis obliquus.

Methods: Ice hockey players from the HC Zubr Přerov hockey club who were approached by their coaches took part in this study. Participation in the study is entirely voluntary, so the choice of probands is random. The entry criterion for entry into the study was the age range of ice hockey players aged 15 to 18 years. Another criterion was that individuals should not have prior knee injury (ligament or meniscus rupture, fracture...), arthroscopic examination, or knee surgery.

Results: 20 male probands were examined. The average age of the examined file is 16, 05 years. Of the 20 probands examined, 16 of them have at least one-sided weakening of vastus medialis obliquus, which is 80% of all examined.

The relationship between the weakened vastus medialis obliquus and patellofemoral pain in ice hockey players has not been established. Comparison of statistical processing results of 0.02 with a critical value of 3.84 ($p < 0.05$) is not statistically significant.

Conclusion: H1 is therefore accepted as the presence of weakening of unilateral weakening of vastus medialis obliquus in more than 75% of ice hockey players has been demonstrated. The H2 hypothesis is rejected because the relationship between patellofemoral pain and the weakened vastus medialis obliquus in ice hockey players has not been confirmed by clinical examination.

Key words: musculus vastus medialis obliquus, patellofemoral joint, patellofemoral pain syndrome