# 研究業績　英文表記

| 和文 | |
|---|---|
| 表題 | せん断波エラストグラフィーを用いたハムストリングス構成筋の他動的性質の違いの検討 |
| 著者名 | 中村雅俊 [1)], 長谷川聡 [2)], 梅垣雄心 [2)], 西下智 [2)], 小林拓也 [2)], 藤田康介, 田中浩基 [2)], 伊吹哲子 [2)], 市橋則明 [2)] |
| 所属 | 1) 新潟医療福祉大学 運動機能医科学研究<br>2) 京都大学大学院医学研究科人間健康科学系専攻 |
| 英文 | |
| Title | The difference in passive tension applied to the muscles composing the hamstrings-comparison among muscles using ultrasound shear wave elastography |
| Author | Nakamura M[1)], Hasegaea S[2)], Umegaki H[2)], Nishishita S[2)], Kobayashi T[2)], Fujita K[2)], Tanaka H[2)], Ibuki S[2)], Ichihashi N[2)] |
| Affiliation | 1) Institute for Human Movement and Medical Sciences, Niigata University of Health and Welfare<br>2)Human Health Sciences, Graduate School of Medicine, Kyoto University |
| Abstract | Background: Hamstring muscle strain is one of the most common injuries in sports. Therefore, to investigate the factors influencing hamstring strain, the differences in passive tension applied to the hamstring muscles at the same knee and hip positions as during terminal swing phase would be useful information. In addition, passive tension applied to the hamstrings could change with anterior or posterior tilt of the pelvis.<br>Purpose: The aims of this study were to investigate the difference in passive tension applied to the individual muscles composing the hamstrings during passive elongation, and to investigate the effect of pelvic position on passive tension.<br>Methods: Fifteen healthy men volunteered for this study. The subject lay supine with the angle of the trunk axis to the femur of their dominant leg at 70° and the knee angle of the dominant leg fixed at 30° flexion. In three pelvic positions ("Non-Tilt", "Anterior-Tilt" and "Posterior-Tilt"), the shear elastic modulus of each muscle composing the hamstrings (semitendinosus, semimembranosus, and biceps femoris) was measured using an ultrasound shear wave elastography.<br>Results: The shear elastic modulus of semimembranosus was significantly higher than the others. Shear elastic modulus of the hamstrings in Anterior-Tilt was significantly higher than in Posterior-Tilt.<br>Conclusion: Passive tension applied to semimembranosus is higher than the other muscles when the hamstring muscle is passively elongated, and passive tension applied to the hamstrings increases with anterior tilt of the pelvis. |
| keyword | Hamstrings; Pelvis; Shear wave elastography |

※本データの英文表記は実際の論文上の表記とは異なります。