

Press release

Balgrist researchers discover a new ligament in the knee

Zürich, 5 July 2019 – Researchers at Balgrist University Hospital in Zurich have discovered a new ligament in the knee joint: the 'accessory iliotibial band-meniscal ligament (AIML)'.

The knee joint is often being evaluated with MRI scans and also regularly checked for abnormalities during surgery. It was previously thought that we knew all anatomical details of this joint. However, the AIML – a narrow fibrous connection between the iliotibial band (running along the outside of the knee) and the lateral meniscus – has not previously been described. According to the study that has just been published,¹ the AIML is an anatomical variant in the fixation of the lateral meniscus. In an analysis of MRI scans performed on more than 1000 people, the AIML was found to be present in 13% of cases. This study was carried out by researchers in the departments of Orthopaedics and Radiology at Balgrist University Hospital.

Higher risk of meniscal tears

Although it is an anatomical variant, the presence of an AIML in the knee joint is clinically relevant. People with an AIML have a much higher risk of lateral meniscal tears than the rest of the population. A tear in the anterior horn of the lateral meniscus was seen in 1.2% of people without an AIML but in 23.5% of those with an AIML. The doctors involved in the study explain this by a reduced mechanical loading capacity when an AIML is present. Further studies are needed to determine whether it is possible to develop a therapy that would protect people with AIMLs from meniscal tears in the future.

For further information, please contact

Balgrist University Hospital Communications Forchstrasse 340 8008 Zurich - Switzerland

+41 44 386 14 15 <u>kommunikation@balgrist.ch</u> www.balgrist.ch

Link to the study: American Journal of Roentgenology, 25 June 2019



¹ The Accessory Iliotibial Band–Meniscal Ligament of the Knee: Association With Lesions of the Lateral Meniscus. Stefan M. Zimmermann, Vesna Njagulj, Benjamin Fritz, Sandro F. Fucentese, Reto Sutter, Christian W. A. Pfirrmann. American Journal of Roentgenology (AJR): 1-6. Ahead of Print doi:10.2214/AJR.18.21071



(A) Accessory iliotibial band-meniscal ligament (AIML) in right knee of 41-year-old man who presented with atraumatic anterolateral knee pain.

(B) Three-dimensional MR image with graphic overlay of AIML (yellow) shows course of distinct soft-tissue attachment (arrows) between iliotibial band (semitransparent structure) and anterolateral aspect of lateral meniscus (white). (*).