

Quantitative MRI assessment of cartilage glyco-saminoglycan content in the ankle

Abstract

Approximately 20% of the population in western civilization suffer from osteoarthritis (OA). Cartilage glycosaminoglycan (GAG) loss is considered to happen at early stages of the disease and is therefore considered an important effect size for clinical research. In the ankle, OA frequently occurs in the course of traumatic cartilage defects. Cartilage repair surgery (CRS) aims to fill the defect and good results have been reported after various surgical techniques, however the data on RT quality remain limited.

This project aims to evaluate new MRI techniques for the assessment of cartilage GAG content in-vivo, to optimize these techniques for the ankle and to use them to assess patients after surgical cartilage repair and cases with OA.

We expect to gain knowledge in the field of surgical treatment of cartilage defects and OA in the ankle, however, this project will yield new quantitative non-invasive in-vivo effect sizes for the use in clinical research on OA.

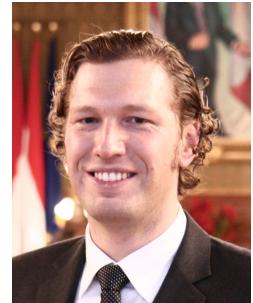
Keywords:

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Further links about the involved persons and regarding the project you can find at

https://archiv.wwtf.at/programmes/life_sciences/LS11-018