



Response to Macchi et al. “Letter to the Editor ‘Histopathological study of the infrapatellar fat pad in the rat model of patellar tendinopathy: A basic study’”



Thank you for your comments and for sharing your experience of pathological changes in the infrapatellar fat pad (IFP) in osteoarthritic (OA) patients [1,2]. It is interesting that similar changes are observed in the IFP in cases of patellar tendinopathy and patients with OA. We agree with your opinion that these changes are accompanied by changes in the ratio of fibrillary components [1]. Unpublished data from our laboratory indicates that the dynamics of the IFP decrease following anterior cruciate ligament reconstruction. We believe that this phenomenon results from the imbalance resulting from excessive synthesis and impaired degradation of fibrillar components, as you have rightly suggested [3]. We should also confirm whether this phenomenon is caused by morphological changes in the IFP using a biopsy.

Although we evaluated histological changes in the IFP using the grading protocol for synovial membranes, we also observed pathological changes in the synovial membrane. We cannot draw any conclusions regarding the degree of interaction between the IFP and the synovial membranes as this study was cross-sectional in design. Understanding this interaction is complicated because the IFP plays both a protective and an inflammatory role in OA [4]. Although we do not have data about the pathological changes in the OA IFP, we believe there may be some degree of interaction between the IFP and the synovial membrane in OA patients.

References

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Takashi Kitagawa

Department of Orthopaedic Surgery, Graduate School of Medical Sciences, Kanazawa University, Kanazawa, Japan
Department of Rehabilitation, Japanese Red Cross Kanazawa Hospital, Kanazawa, Japan

Junsuke Nakase*

Yasushi Takata

Kengo Shimozaki

Kazuki Asai

Hiroyuki Tsuchiya

Department of Orthopaedic Surgery, Graduate School of Medical Sciences, Kanazawa University, Kanazawa, Japan

* Corresponding author at: Department of Orthopaedic Surgery, Graduate School of Medical Sciences, Kanazawa University, 13-1 Takara-machi, Kanazawa 920-8641, Japan.

E-mail address: nakase1007@yahoo.co.jp (J. Nakase).