

Supplementary material

Methods – selection of patients for synovial fluid collection

CMC-I osteoarthritis

Synovial fluid (SF) samples were randomly collected from 10 patients with severe CMC-I OA who were scheduled for trapeziectomy surgery. All of them had non-erosive OA of the CMC-I, confirmed by radiological features.

Early knee osteoarthritis

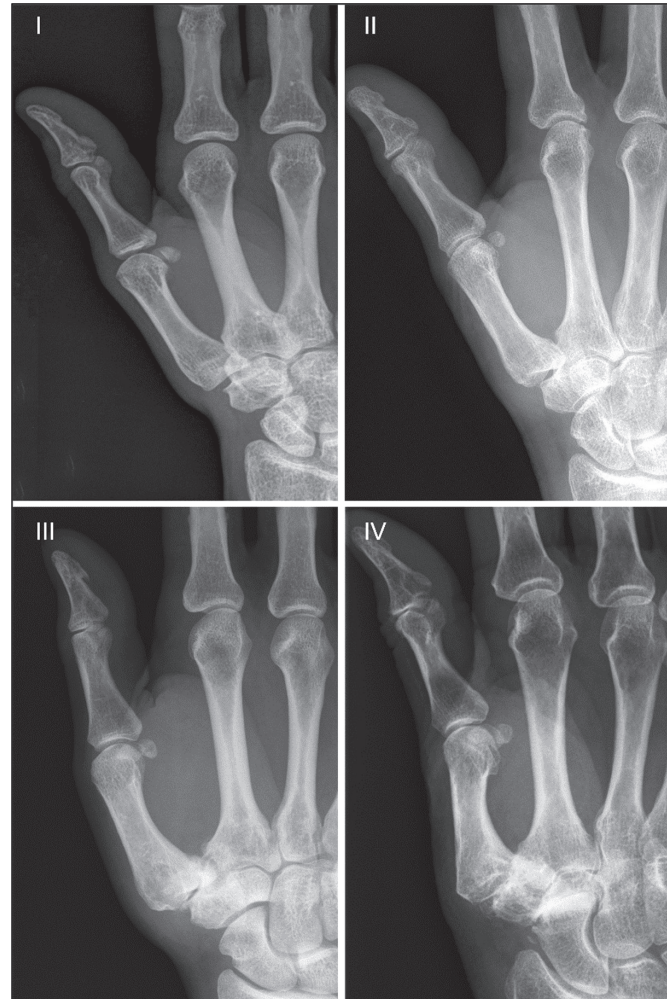
SF samples were collected from 10 patients scheduled for arthroscopic surgery. The main indication for surgery was suspicion of a meniscal tear. Patients with inflammatory arthritis, severe arthritis, corticosteroid injection within 6 weeks, blood dyscrasias, and active malignancy were excluded. The previous use of non-steroidal anti-inflammatory drugs was not considered to be an exclusion criterion. The diagnosis of early arthritis was made during arthroscopy, based on the presence of minimal visible chondral lesions.

Advanced knee osteoarthritis

SF samples were collected from 10 patients with severe knee OA who were scheduled for elective total knee replacement for management of primary idiopathic OA. Exclusion criteria were similar to those for early OA.

Knee rheumatoid arthritis (RA)

SF samples were collected from 10 RA patients who were diagnosed as fulfilling the ACR-EULAR classification criteria for rheumatoid arthritis.



Supplementary Figure 1. Eaton-Glickel radiological grading of OA lesions of the CMC-I joint. Grade I: normal or only slightly widened joint space (due to joint effusion or synovitis). Grade II: mild CMC-I cartilage space narrowing and small osteophytes or loose bodies, < 2 mm in diameter. Grade III: significant narrowing or complete obliteration of the CMC-I joint space with osteophytes or loose bodies, > 2 mm in diameter. Grade IV: The same as grade III, but the scaphotrapezotrapezoidal (STT) joint is also affected.