MINERVA
ORTOPEDICA E TRAUMATOLOGICA
VOLUME 71 - No. 2 - JUNE 2020
EDIZIONI · MINERVA · MEDICA

The online version of this article is located at http://www.minervamedica.it
Minerva Ortopedica e Traumatologica 2016 ????;67(??):000-000

Mini-open surgical treatment of an ex professional volleyball player with unresponsive Hoffa's disease

Dear Editor,

Hoffa's disease is a situation of impingement of infrapatellar fat body between patellofemoral and tibiofemoral articular surfaces. It is an uncommon and peculiar cause of anterior knee pain and the pathophysiological process at the basis of this pathology is still obscure. Several factors such as micro trauma, particular sports and work activities were related with this condition. In particular, activities that require full flection or extension of the knee and prolonged kneeling or squatting seem to be involved in this disease.[1]

Our patient was a 35 year-old male with a 15 years history of mild anterior knee pain of the left knee not responsive to common conservative treatments. He was a semi-professional volleyball player and he reported the onset of pain after sports activity. According to team physiotherapist and medical staff, the patient followed an intensive physical program including knee manipulation, quadriceps strengthening and patellar tendon eccentric exercise followed by knee taping. Due to the persistence of knee pain and swelling, patient underwent subsequent oral NSAID therapies during volleyball season and fat pad steroid injections over season break, with moderate results during inactivity period and poor results at the beginning of the next sports season and only little daily life impairment. After some years, outcomes of those therapies gradually reduced until no benefit.

Physical examination showed a moderate swelling of left knee with a soft elastic consistency of infrapatellar region and some discomfort at maximum grades of flexion and extension, but no signs of knee instability. Hoffa's test was moderately positive. We used the Lysholm Knee Scale Questionnaire before and 1 year after treatment to evaluate knee function. Preoperative score was 54.

We have performed the following radiological exams: antero-posterior and lateral X-rays, MRI and CT scan of the knee. These exams revealed the presence of a massive, rather homogeneous expansion and swelling of Hoffa's fat pad with fibrotic bands and some nodules, especially in the deeper part. A modest fluid layer appeared in joint and suprapatellar space. The exams also allowed the presence of a proximal tibial lesion due to an asymptomatic enkroma and a distal femur exostosis surrounded by a cartilaginous cap. We considered the two asymptomatic lesions incidental and not related with the onset of the pathology (Figure 1A, B).

These findings, along with clinical evaluation, sug-

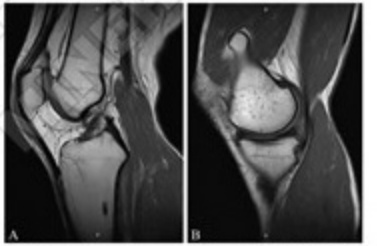

Figure 1.—MRI findings. A) T1-weighted image shows expansion and swelling of Hoffa's fat pad, a hypointense small proximal tibial lesion and B) hyperintense distal femur exostosis.