Answer QUIZ vol. 15, no. 3**Young men with bilateral pain in the lower part of patella****Florin Vreju**

Department of Rheumatology, University of Medicine and Pharmacy Craiova, Romania

1. What is the diagnosis that could explain these changes?

The enlargement of the proximal part of the patellar tendon revealed by ultrasonography along with the distal kneecap irregularities and the hyperechoic line inside the tendon are characteristic to Sinding-Larsen-Johansson syndrome.

2. What question in the anamnesis could be revelatory for the case?

The Sinding-Larsen-Johansson syndrome frequently appears in boys between 10 and 15 years old, with some conditioning routines, such as running or jumping. Rapid skeletal growth might increase the risk to develop this condition. The patient played basketball between 12 and 16 years old and the first symptoms in the knee appeared after few years of intense training. So, the question that could reveal the mystery of the case would be: Did the patient played any sports in adolescence?

3. What differential diagnostics should be done?

The differential diagnosis should first of all include the jumper's knee, very unlikely in this case, since the patient didn't had any increase in the physical activity lately.

The inflammatory changes in the patellar tendon, secondary to spondylarthritides, that could mimic the complaints, aren't present at this level, both after clinical or ultrasound examination. The patellar sleeve fractures appear in the pediatric population, between 8-12 years and are acute, the result of sudden contraction of the quadriceps tendon. Osgood Schlatter disease is the counterpart disease, involving the lower part of the patellar tendon

at its insertion into the tibial tuberosity. The imagistic differential has to include the bipartite patella, condition explained by the presence of a secondary ossification center. Only 2% of those patients experience tenderness at this level. One should take into consideration as a differential, the crystal deposition inside tendon or even calcification secondary to tendon previous injuries.

4. What are the recommendations for the patients?

Although there are some possible complications, as complete separation of the growth center of the patella, or recurrence of the symptoms in adulthood, like in our patient, many of the cases can be resolved with just a reduction of the activity. Limiting the sport as a professional, the intense activity, having appropriate warm up before activity and maintaining ideal body weight are the most important recommendation for this type of patient. Exercises that increase the range of motion in the knee and strengthen the quadriceps tendon are indicated. Stretching the quadriceps, besides increasing flexibility in the hamstrings should be included in the rehabilitation program. As a medication, non-steroidal anti-inflammatory drugs might be sometimes helpful along with pain relievers such as acetaminophen. Corticosteroid injections are subject of controversies as cortisone might weaken tendons.

Selective references

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Corresponding author: Florin Vreju

Rheumatology Department, University of
Medicine and Pharmacy Craiova
Petru Rares 2-4, Craiova, Romania
Email: florin_vreju@yahoo.com