Reviewer's report

Title: Juvenile Osteochondritis Dissecans in the Lateral Femoral Condyle
Requiring Osteochondral Autograft as a Revision Procedure - A case report-

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Reviewer: Shuji Horibe

Additional comments to authors:

The authors reported a 6-year-old boy with COD of the lateral femoral condyle in both knees. He underwent an autogenous osteochondral graft after failed arthroscopic drilling for left knee, and arthroscopic drilling for right knee. He became asymptomatic and the radiograph at three and a half years following the surgery showed complete healing of both lesions.

Although it is an extremely rare and interesting case with juvenile OCD of bilateral knee requiring repeat surgeries, there are several problems.

1. Differential diagnosis
Since stage-I OCD could be confused with variants of ossification during normal development of the knee, the differential diagnosis of these two disorders is clinically very important in order to avoid unnecessary treatment of anomalies of ossification. MRI is considered to be an effective non-invasive diagnostic method for these two disorders, and there are many papers (Nawata K et al. Pediatr Radiol (1999), Gebarski K & Hernandez RJ, Pediatr Radiol (2005) Please describe how the authors differentiate the juvenile OCD from the normal variants of ossification..

2. Surgical indication for arthroscopic drilling for left knee (Case report In 93-96)
The authors decided to do surgical intervention because of no apparent radiological healing after conservative treatment for 6 months. Did they evaluated by reconstructed CT? Healing of the OCD lesions is difficult to detect only by plain radiography. In addition, they did not describe the clinical symptom, such as pain.

3. Arthroscopic drilling for OCD located at the posterior area
In this case, the OCD lesion is located at the posterior area. It may be difficult to drill the posterior lesion. Did they confirm that drilling could be achieved accurately by using post-op. MRI?

4. Autogenous osteochondral graft transplantation
They described “autogenous cylindrical osteochondral graft transplantation (8 mm in diameter) was performed,”. It is too simple. Please describe the surgical procedures in more detail and use a photo if possible.

5. Post-op CT
The authors showed only Rosenberg view at 3 and a half years after second
operation (figure 4). In this case, an autogenous osteochondral graft transplantation was performed at younger age. CT images are very helpful for readers to understand what happens to both donor and recipient sites after this procedures.