Second-look Arthroscopic Findings after Periacetabular Osteotomy in Patients with Acetabular Dysplasia

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Abstract

Background: The purpose of this study was to examine the intra-articular pathology in patients with dysplastic hips undergoing periacetabular osteotomy (PAO).

Methods: We performed hip arthroscopy at the time of PAO and at a mean of 15 (range, 11–27) months postoperatively as a second-look arthroscopy in 36 hips. The 36 patients comprised 35 females and one male, with a mean age of 38.3 (range, 18–64) years at the time of the primary surgery. We examined the clinical features and radiological and arthroscopic findings.

Results: At the time of the primary surgery, cartilaginous damage was found on theacetabular side in 16 hips, and on the femoral side in 12 hips. Labral tears were found in 26 of the total 36 hips (72.2%). The radiological parameters were improved by PAO. At the time of the second-look arthroscopy, three hips showed improvement (3/36 hips, 8.33%) and seven showed exacerbation (7/36 hips, 19.4%) of cartilaginous damage on the acetabular side. On the femoral side, five hips showed improvement (5/36 hips, 13.9%) and eight showed exacerbation (8/36 hips, 22.2%) of cartilaginous damage. In the 26 hips with labral tears at the time of the primary surgery, spontaneous repair was not found at the time of the second-look arthroscopy.

Conclusions: Upon second-look arthroscopy after PAO, we did not find any substantial changes in labral tears. If patients have residual pain after PAO caused by a labral tear, we recommend surgical repair based on these findings.

Level of Evidence: Therapeutic study, Level IV.

Key words: Second-look arthroscopy, Periacetabular osteotomy, Developmental dysplasia of the hip, Labral tear