

# **Long-Term Outcomes of Surgical Treatment for Primary Synovial Chondromatosis of the Hip**

Chanwoo Park<sup>1</sup>, Seung-Jae Lim<sup>1</sup>, Youn-Soo Park<sup>1</sup>

<sup>1</sup>Samsung Med Ctr

## **INTRODUCTION:**

Primary synovial chondromatosis is a rare benign condition characterized by cartilaginous metaplasia of the synovium, resulting in multiple intra-articular loose bodies. This condition can cause severe pain, disability, and secondary osteoarthritis if not treated properly. The purpose of the study was to report the long-term clinical outcomes of surgical treatment for synovial chondromatosis of the hip.

## **METHODS:**

We retrospectively reviewed a consecutive series of open synovectomy and loose body removal performed at a single center from March 1996 to December 2013. Of the 78 patients (78 hips) identified, 63 patients (63 hips) who satisfied a minimum follow-up of 10 years were included. The Harris Hip Score (HHS) and self-reported patient satisfaction score were used for clinical evaluation. Rates of symptomatic disease recurrence, advanced osteoarthritis, total hip arthroplasty (THA), and other surgical complications were analyzed. The mean age at operation was 40 (range, 15–66) years, and the mean follow-up duration was 17 (range, 10–26) years.

## **RESULTS:**

The mean HHS improved significantly from 58 (range, 35–82) points preoperatively to 89 (range, 51–100) points at final evaluations ( $P<0.001$ ). Fifty-six (88.9%) patients reported good or excellent clinical outcomes, and 53 (84.1%) patients graded their surgery as satisfactory. Symptomatic disease recurrence was identified in 4 (6.3%) patients; all were treated with re-arthrotomy. Four (6.3%) patients underwent THA for advanced osteoarthritis, and one (1.6%) patient had THA for osteonecrosis of the femoral head. No malignant transformation was found during the observation.

## **DISCUSSION AND CONCLUSION:**

We found that open synovectomy and removal of loose bodies was a reliable option for the treatment of primary synovial chondromatosis of the hip. The procedure was effective in relieving symptoms with a low rate of local recurrence and osteoarthritis progression after a mean follow-up of 17 years.