

Arthroscopic Synovectomy and Synoviorthesis for Pigmented Villonodular Synovitis in Hip

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Summary:

Combined with postoperative synoviorthesis, arthroscopic synovectomy shows good results for hip PVNS.

Abstract:

Objectives:

Diffuse pigmented villonodular synovitis affects the entire synovium and typically occurs in large joints. The hip following the knee is the second most commonly affected joint. As the synovitis will damage the surrounding cartilage, bone and tissues, the prognosis of hip pigmented villonodular synovitis (PVNS) is poor. For the high rate of recurrence, the optimal therapy has not yet been found. Compared with surgical dislocation and radical synovectomy, arthroscopic synovectomy shows potential benefits for hip PVNS with minimal invasive technique. The purpose of this retrospective study is to present the outcome of our strategy for hip PVNS with arthroscopic synovectomy and postoperative synoviorthesis.

Methods:

Between 2003 and 2010, 32 consecutive patients with hip PVNS were identified and underwent arthroscopic synovectomy. Patients with a mean age of 41 years (18-55) described progressive pain around hip and limited range of motion and function. All cases were identified by MRI and arthroscopic observation, and confirmed by pathological examination. The joint space on X-ray narrowed in 18 cases. Under arthroscopic observation, most of the pathologic synovium aggregated in the peripheral compartment, which destruct the labrum and cartilage of femoral head and acetabular. Postoperative synoviorthesis began from the 5th week after surgery and lasted for 5-6 weeks. Clinical outcome were evaluated at minimum 2-year follow-up with Harris hip score and MRI.

Results:

During the follow-up, no recurrence was found in 30 patients, who got significant improvement of hip function. Of the 2 recurred cases, 1 patient received arthroscopic surgery and synoviorthesis again; and another patient underwent arthroplasty at last.

Conclusions:

As a minimal invasive surgery, arthroscopic synovectomy is an applicable treatment for hip PVNS. The postoperative synoviorthesis is also the important method to prevent the recurrence.