



ORIGINAL ARTICLE

Hip arthroscopy in males younger than 40 with femoroacetabular impingement: Short-term outcomes[☆]



J. Más Martínez^{*}, M. Morales-Santías, D. Bustamante Suarez Suarez de Puga, J. Sanz-Reig

Traumatología Vistahermosa, Clínica Vistahermosa, Alicante, Spain

Received 27 March 2014; accepted 20 May 2014

KEYWORDS

Hip;
Femoroacetabular
impingement;
Hip arthroscopy;
Outcomes

Abstract

Introduction and objectives: Femoroacetabular impingement is probably the most common mechanism that leads to the development of early cartilage and labral damage in the non-dysplastic hip. The objective was to evaluate the outcomes of hip arthroscopy as a treatment for femoroacetabular impingement in patients with high level of function.

Material and methods: A prospective study was performed on 41 patients younger than 40 years old undergoing hip arthroscopy for femoroacetabular impingement. Modified Harris Hip Score and HOS and IHOT questionnaires were used for clinical assessment. Radiological evaluation was made for joint space and alpha angle.

Results: The mean age of patients was 32.7 years. Labrum injury was detected in 78%, and acetabular cartilage injury in 56% of cases. The average follow-up was 31.3 months. There was a significantly improvement in the mean score in the clinical questionnaires. Radiologically there was no change in the mean joint space, with significantly reduction to normal values of the alpha angle. All patients returned to sports at their pre-injury level of function.

Discussion: Hip arthroscopy resulted in improvement in hip functional outcomes with correction of the underlying osseous deformity and treatment of the associated labral and cartilage pathology, with the return of patients to their pre-injury sports. Further follow-up is essential to confirm the stability of the clinical and radiological outcomes.

© 2014 SECOT. Published by Elsevier España, S.L.U. All rights reserved.

[☆] Please cite this article as: Más Martínez J, Morales-Santías M, Bustamante Suarez Suarez de Puga D, Sanz-Reig J. La cirugía artroscópica de cadera en deportistas varones menores de 40 años con choque femoroacetabular: resultado a corto plazo. Rev Esp Cir Ortop Traumatol. 2014;58:343–350.

^{*} Corresponding author.

E-mail address: Jmas@traumavist.com (J. Más Martínez).

PALABRAS CLAVE

Cadera;
 Choque
 femoroacetabular;
 Artroscopia de
 cadera;
 Resultados

La cirugía artroscópica de cadera en deportistas varones menores de 40 años con choque femoroacetabular: resultado a corto plazo

Resumen

Introducción y objetivos: El choque femoroacetabular es el mecanismo más común descrito en la literatura que conduce a la lesión del labrum y del cartílago articular en la cadera no displásica. Nuestro objetivo fue determinar los resultados clínicos y radiológicos de la cirugía artroscópica de cadera como tratamiento del choque femoroacetabular en pacientes jóvenes con alta demanda funcional.

Material y métodos: Estudio prospectivo de 41 pacientes menores de 40 años tratados mediante cirugía artroscópica de cadera por choque femoroacetabular. Para valoración clínica se utilizaron la escala modificada de Harris, cuestionarios de valoración HOS e IHOT12. Se realizó una valoración radiológica para determinar altura articular y ángulo alfa.

Resultados: La edad media de los pacientes fue de 32,7 años. Se detectó lesión del labrum en el 78% y del cartílago acetabular en el 56% de los casos. El seguimiento medio de los pacientes fue de 31,3 meses. Hubo una mejora significativa en la puntuación media en los cuestionarios de valoración clínica. Radiológicamente no se modificó la altura media del espacio articular, con reducción significativa a valores normales del ángulo alfa. Todos los pacientes se reincorporaron a su actividad deportiva habitual previa.

Discusión: La cirugía artroscópica de cadera ha permitido la mejoría clínica de los pacientes con corrección de la deformidad ósea, lesión labral y cartilaginosa, y reincorporación de los pacientes a sus actividades deportivas previas a la cirugía. Es fundamental un mayor seguimiento para confirmar la estabilidad de los resultados clínicos y radiológicos obtenidos.

© 2014 SECOT. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

The effectiveness of arthroscopic procedures in the knee, shoulder and ankle has been well-established and their extensive use by Traumatology and Orthopedic Surgery Services has enabled the development of the corresponding instrumentation in recent decades. This experience has been extrapolated to the hip joint; however, the hip presents specific characteristics. It is an enarthrosis enveloped in a capsule, ligaments and muscles in a deep anatomical location, which requires specific, longer and more flexible instrumentation. The technical complexity and long learning curve associated lead to an initial rejection of the incorporation of arthroscopy hip surgery (AHS) into the range of services provided at our hospitals. Initially, AHS was indicated as a diagnostic procedure, but a better understanding of hip pathology and improvement of the instrumentation have led to an increase in the number of therapeutic procedures.^{1,2}

According to the literature, femoroacetabular impingement (FAI) is the most common mechanism of injury of the labrum and joint cartilage of non-dysplastic hips of young patients. The relation with sports activities involving flexion-adduction-internal rotation and combined movements is progressively increasing. Different surgical techniques to correct the deformity and treat lesions of the labrum and joint cartilage have been reported, including safe dislocation with ample exposure of the joint, minimally invasive anterior approaches and AHS.³⁻⁵ Safe dislocation is the benchmark technique for the treatment of FAI, although

recent systematic reviews comparing it to AHS have questioned its superiority.^{6,7}

Our working hypothesis was that AHS is an effective technique for the treatment of FAI in young male athletes with high, short-term functional demands. In order to verify this hypothesis, our main objective was to assess the clinical and radiographic results obtained with AHS following FAI among male athletes aged under 40 years. The secondary objective was to determine whether AHS was able to correct the characteristic anatomical alterations of FAI.

Materials and methods

Since 2009, our prospective database registered all patients intervened through AHS. From this database we selected patients who fulfilled the following criteria: age under 40 years, male gender, high-intensity sports physical activity, diagnosis of FAI (Cam, Pincer or mixed type) and Tönnis stage 0–2. The diagnosis of FAI was established based on the anamnesis, positive pincer maneuver in exploration and pathognomic radiographic signs. The assessment of AHS results in this study required a minimum postoperative follow-up period of 12 months.

We excluded patients with hip dysplasia determined by a centre-edge angle less than 25°, Legg-Calve-Perthes disease, prior hip surgery and age under 18 years. All the patients gave their informed consent for inclusion in the study and the study was approved by the clinical research ethics committee of our centre.

Download English Version:

<https://daneshyari.com/en/article/4087183>

Download Persian Version:

<https://daneshyari.com/article/4087183>

[Daneshyari.com](https://daneshyari.com)