Rev Esp Cir Ortop Traumatol. 2016;60(6):387–393

Revista Española de Cirugía Ortopédica y Traumatología

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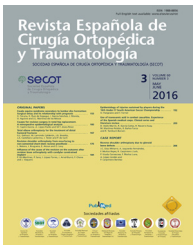

ORIGINAL ARTICLE

Complications after ankle and hindfoot arthroscopy☆

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Received 5 February 2016; accepted 25 April 2016

KEYWORDS
Arthroscopy;
Ankle;
Hindfoot;
Complications

Abstract
Objective: To evaluate the percentage of complications associated with ankle and hindfoot arthroscopy in our hospital and to compare the results with those reported in the literature.
Material and method: A retrospective descriptive review was conducted on the complications associated with ankle and hindfoot arthroscopy performed between May 2008 and April 2013. A total of 257 arthroscopy were performed, 23% on subtalar joint, and 77% of ankle joint. An anterior approach was used in 69%, with 26% by a posterior approach, and the remaining 5% by combined access.
Results: A total of 31 complications (12.06%) were found. The most common complication was neurological damage (14 cases), with the most affected nerve being the superficial peroneal nerve (8 cases). Persistent drainage through the portals was found in 10 cases, with 4 cases of infection, and 3 cases of complex regional pain syndrome type 1.
Discussion: There have been substantial advances in arthroscopy of ankle and hindfoot in recent years, expanding its indications, and also the potential risk of complications.
The complication rate (12.06%) found in this study is consistent with that described in the literature (0–17%), with neurological injury being the most common complication.
Conclusions: Ankle and hindfoot arthroscopy is a safe procedure. It is important to make a careful preoperative planning, to use a meticulous technique, and to perform an appropriate post-operative care, in order to decrease the complication rates.

PALABRAS CLAVE
Artroscopia;
Tobillo;
Retropié;
Complicaciones

Complicaciones tras la artroscopia de tobillo y retropié

Resumen
Objetivo: Evaluar el porcentaje de complicaciones asociadas con la artroscopia de tobillo y retropié en nuestro centro y comparar nuestros resultados con aquellos publicados en la literatura.

☆ Please cite this article as: Blázquez Martín T, Iglesias Durán E, San Miguel Campos M. Complicaciones tras la artroscopia de tobillo y retropié. Rev Esp Cir Ortop Traumatol. 2016;60:387–393.

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Material y método: Realizamos un estudio descriptivo retrospectivo de las complicaciones asociadas con las artroscopias de tobillo y retropié realizadas entre mayo del 2008 y abril del 2013. Se revisaron 257 artroscopias, un 23% de subastragalina y un 77% de tobillo. El acceso empleado fue anterior en el 69%, posterior en el 26% y combinado en el 5% restante.
Resultados: Se recogieron 31 complicaciones (12,06%), siendo la complicación más frecuente la lesión neurológica (14 casos) y el nervio más afectado el nervio peroneo superficial (8 casos). Observamos 10 casos de drenaje persistente a través de los portales, 4 casos de infección y 3 casos de síndrome de dolor regional complejo tipo 1.
Discusión: Los avances en la artroscopia de tobillo y retropié, y el aumento de sus indicaciones, conllevan un aumento del riesgo potencial de complicaciones.
La tasa de complicaciones reflejada en nuestro análisis (12,06%) es comparable con lo descrito en la literatura (0-17%), siendo la complicación más frecuente la lesión neurológica.
Conclusiones: La artroscopia de tobillo y retropié es un procedimiento seguro. Es importante realizar una cuidadosa planificación preoperatoria, utilizar una técnica meticulosa y realizar un cuidado postoperatorio apropiado para disminuir la tasa de complicaciones.

Introduction

Arthroscopic surgery of the foot and ankle has seen major advances since its infancy in 1972, which have significantly extended its indications.

The arthroscopic technique enables direct visualisation of the intra-articular structures without the need for extensive approaches, which helps to reduce morbidity and postoperative pain. Furthermore, it has several advantages compared to conventional surgery, such as: reduced postoperative pain, reduced hospital stay associated with the procedure and rehabilitation, and an earlier return to routine activities.

However, as with any surgical procedure, it is not free from complications, the most common being neurological injury.

The objective of this study is to assess the percentage of complications associated with ankle and hindfoot arthroscopy in our series, and compare the outcomes with those published in the literature.

Material and method

We present a retrospective, descriptive study of ankle and hindfoot arthroscopies performed in our hospital between May 2008 and April 2013.

Information was gathered on the patients' demographic data, diagnoses, arthroscopic procedures undergone, duration of follow-up and complications.

With regard to surgical technique, ischaemia at the root of the lower limb and intermittent non-invasive traction were used in all cases, at the discretion of the surgeon. We used a Guhl ankle distraction strap for the traction (Smith & Nephew Inc., Andover, MA 01810, USA), anchored to a harness placed by the surgeon under the sterile gown (Fig. 1).

In arthroscopies using an anterior approach, we placed the patient in the supine position. Initially we created the anteriomedial portal, just medial to the tendon of the anterior tibial muscle, coinciding with a palpable depression. After making a vertical cutaneous incision, we inserted a straight mosquito until reaching the joint, and then inserted the sheath of the arthroscope with the ankle in dorsiflexion, to prevent iatrogenic injury to the articular cartilage. We then created the anterolateral portal just lateral to the

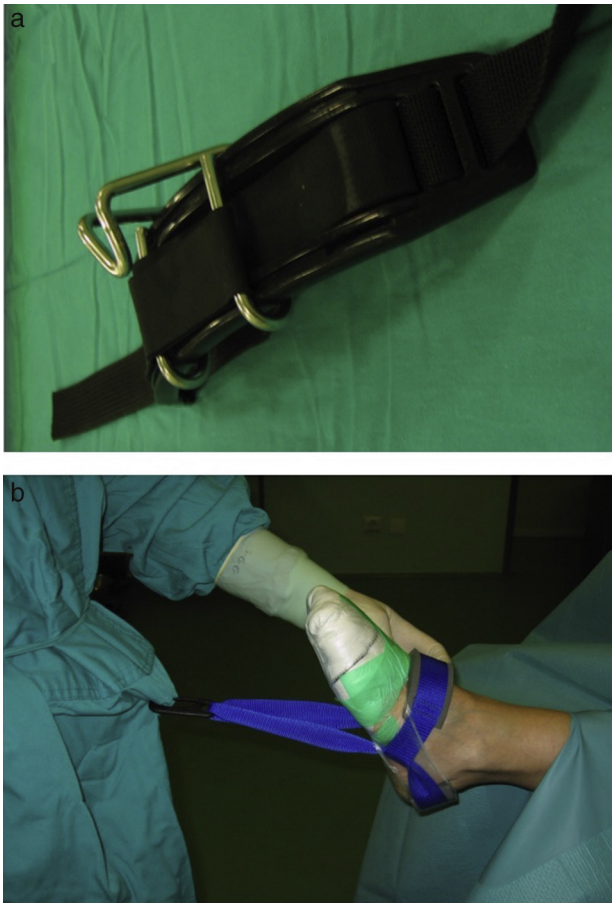

Figure 1 The harness is placed by the surgeon around his waist under the gown (a). Then the surgeon puts on the gown and anchors the sterile Guhl strap to the harness (b). This enables us to apply traction to the ankle joint on demand.