

# Reumatología Clínica



www.reumatologiaclinica.org

# Letters to the Editor

## **Posterior Ankle Impingement Syndrome**



# Síndrome del choque posterior del tobillo

### Dear Editor,

We present a case of a 38-year-old female with a history of right posterior ankle pain for 2 months which worsened with walking and standing up for a long time. There were no complaints in other joints. On physical examination the patient presented swelling of the posterior ankle and complained of pain with forced flexion of the right feet. There was no increase of inflammation parameters in blood tests. Radiographic lateral view of the right ankle demonstrated an enlarged Stieda's process (Fig. 1). The magnetic resonance imaging (MRI) of the right ankle confirmed the Stieda's process (Fig. 1) being able to originate posterior conflict, with a subtle bone marrow edema. A slight effusion was observed in the anterior and posterior compartments of the tibiotalar joint as well as edema of the subcutaneous fat. The patient was told to rest and NSAID were prescribed with resolution of the hindfoot pain.

The posterior ankle impingement syndrome is a condition resulting from soft tissue compression between the posterior process of the calcaneus and the posterior tibia during ankle plantar flexion.<sup>1</sup> An important cause of the syndrome is a prominent posterolateral talar process (Stieda's process) or the presence of os trigonum, due to its impact on adjacent structures.<sup>2</sup> Patients usually report chronic or recurrent posterior ankle pain caused or exacerbated by forced plantar flexion.<sup>3</sup> Other causes of this syndrome may result from flexor hallucis longus tenosynovitis, ankle osteochondritis, subtalar joint disease, and fracture. Diagno-

sis of posterior ankle impingement syndrome is based primarily on clinical history and physical examination. Radiography, computed tomography, and MRI are useful to detect associated bone and soft-tissue abnormalities.<sup>3</sup> MRI can identify the presence of a Stieda's process or a separate os trigonum in addition to secondary findings that suggest posterior ankle impingement as well as: increased signal intensity in the soft tissues posterior to the ankle, thickening of the posterior joint capsule, posterior and subtalar synovitis, flexor hallucis longus tenosynovitis and bone marrow edema pattern in the os trigonum and posterior talus.<sup>4•7</sup> Symptoms typically improve with nonsurgical management but surgery may be required in refractory cases. A literature review on conservative treatment of the posterior ankle impingement syndrome suggests that the initial treatment should aim at decreasing inflammation with non-steroidal anti-inflammatory drugs and activity restriction (avoidance of forced plantar flexion).<sup>8</sup> Furthermore, a physiotherapy program that includes soft tissue therapy, stretching and mobilizations of restricted joints of the lower kinetic chain should be implemented in conjunction with a progressive strengthening. balance and proprioception enhancement program.<sup>8,9</sup> Cortisone injections can be performed in patients with higher levels of pain. These injections into the affected area may reduce the pain and allow the patient to progress into a rehabilitation program.<sup>10</sup> It is also suggested to tape or brace the ankle in a protective dorsiflexion position when the patient undertakes intense activities, such as sports.<sup>2</sup>

This case emphasizes the importance of considering posterior ankle impingement due to a Stieda's process of the talus as a cause of hindfoot pain. In fact, it is an underrecognized cause of posterior ankle pain but imaging can easily make the diagnosis and guide appropriate treatment.



Fig. 1. Lateral right ankle radiography (A), T1 weighted sequence (B) and sagittal STIR MRI sequence (C) images demonstrating an enlarged Stieda's process (arrows) with mild bone marrow and soft tissues edema.

# **Conflict of interest**

The authors declare that they have no conflicts of interest.

### References

- Robison P, White LM. Soft-tissue and osseous impingement syndrome of the ankle: role of imaging in diagnosis and management. Radiographics. 2002;22:1457–71.
- Maquirriain J. Posterior ankle impingement syndrome. J Am Acad Orthop Surg. 2005;13:365–71.
- 3. J Am Acad Orthop Surg. 2005;13:365-71.
- Peace KA, Hillier JC, Hulme A, Healy JC. MRI features of posterior ankle impingement syndrome in ballet dancers: a review of 25 cases. Clin Radiol. 2004;59:1025–33.
- 5. Bureau NJ, Cardinal E, Hobden R, Aubin B. Posterior ankle impingement syndrome: MR imaging findings in seven patients. Radiology. 2000;215:497–503.
- 6. Wakeley CJ, Johnson DP, Watt I. The value of MR imaging in the diagnosis of the os trigonum syndrome. Skelet Radiol. 1996;25:133–6.
- Lima CMAO, Ribeiro SB, Coutinho EPD, Vianna EM, Domingues RC, Júnior ACC. Magnetic resonance imaging of ankle impingement syndrome: iconographic essay. Radiol Bras. 2010;43:53–7.

# 

#### Respuesta a: Alfavirus tropicales artritogénicos

# To the Editor,

We read the complete review recently reported by Mejía and López-Vélez on tropical arthritogenic alphaviruses with interest.<sup>1</sup> However, based on our experience in Colombia, a country that is significantly affected by arboviruses, such as Chikungunya virus and Zika virus infections, there are certain aspects of the review that should have been mentioned.<sup>2</sup>

Latin America is seeing the emergence of new tropical viral agents, transmitted by arthropod vectors (arboviruses). They have been classified into 4 groups, A, B, C and D, the first 2 being of greater clinical importance.<sup>2</sup> Group A is comprised of the genus alphavirus, involving Chikungunya virus and Mayaro virus, both arthritogenic; whereas group B includes other tropical arthritogenic viruses of other genera and families, also of considerable clinical importance, including their rheumatological manifestations, such is the case of Zika and dengue viruses.<sup>2</sup> The title of the article makes one think that it refers only to arthritogenic alphaviruses, but that does not occur in Table 1, where there is a broad spectrum of viruses that cause musculoskeletal manifestations, which makes one think that the authors are dealing in general with viruses of rheumatological importance. However, in this case, they should have mentioned, for example, Zika virus, which not only provokes arthralgia and other rheumatological manifestations, but has recently been detected directly in synovial fluid, where it can even remain for several weeks.<sup>3</sup>

Speaking specifically of Chikungunya virus, one of the most important arthritogenic alphaviruses in terms of its acute and chronic morbidity and its persistence for long periods of time, in Colombia, between 2014 and 2015, there were more than 3 million new cases, and a proportion of nearly 50% of those patients developed chronic post-Chikungunya inflammatory rheumatism

- Soler T, Jezerskyte Banfi R, Katsmen L. The conservative treatment of posterior ankle impingement syndrome in professional ballet dancers: a literature review and experts consensus. Eur Sch Physiother. 2011:1–24.
- Verhagen E, van der Beek A, Twisk J, Bouter L, Bahr R, van Mechelen W. The effect of a proprioceptive balance board training program for the prevention of ankle sprains: a prospective controlled trial. Am J Sports Med. 2004;32: 1385–93.
- Luk P, Thordarson D, Charlton T. Evaluation and management of posterior ankle pain in dancers. J Dance Med Sci. 2013;17:79–83.

Nádia Martins,\* Maria Inês Seixas, Maura Couto, Paulo Monteiro

Rheumatology Department, Hospital de São Teotónio, Viseu, Portugal

#### \* Corresponding author.

E-mail address: nadia\_filipaem@hotmail.com (N. Martins).

#### 2173-5743/

© 2017 Elsevier España, S.L.U. and Sociedad Española de Reumatología y Colegio Mexicano de Reumatología. All rights reserved.

(pCHIK-CIR). This has been documented in a number of cohorts in the departments of Sucre,<sup>4</sup> Tolima<sup>5</sup> and Risaralda,<sup>6</sup> since the beginning of 2016, following along the lines of estimates<sup>7</sup> and meta-analyses of observational studies conducted in other countries.<sup>8</sup> Thus it is surprising that, when discussing pCHIK-CIR, the authors refer only to studies dealing with Reunion Island in France, but there is absolutely no mention of Latin America.

It is important to call attention to the relatively high frequency observed in certain reports, with ranges from 14.4% to 87.2%, as well as a mean persistence of 20.12 months in 47.57% of the patients (95% confidence interval: 45.08–50.13), and a duration of even more than 5 years.<sup>7,9</sup> Thus, pCHIK-CIR has been established as a challenge for Latin American rheumatology.

Finally, it is also surprising that there is such a limited reference to Mayaro virus, especially since, after Chikungunya, this arthritogenic alphavirus could be important not only because of its acute morbidity, but also chronic as well, in many Latin American countries. New outbreaks have recently been reported in Venezuela and in Haiti, among others. Thus, this virus should also be considered in the differential diagnosis.<sup>10</sup>

### References

- Mejía C-R, López-Vélez R. Alfavirus tropicales artritogénicos. Reumatol Clin. 2017.
- Rodríguez-Morales AJ, Anaya JM. Impacto de las arbovirosis artritogénicas emergentes en Colombia y América Latina. Rev Colomb Reumatol. 2016;23:145–7.
- Roimicher L, Ferreira OC Jr, Arruda MB, Tanuri A. Zika virus in the joint of a patient with rheumatoid arthritis. J Rheumatol. 2017;44:535.
- Rodriguez-Morales AJ, Villamil-Gomez W, Merlano-Espinosa M, Simone-Kleber L. Post-Chikungunya chronic arthralgia: a first retrospective follow-up study of 39 cases in Colombia. Clin Rheumatol. 2016;35:831–2.
- Rodríguez-Morales AJ, Calvache-Benavides CE, Giraldo-Gómez J, Hurtado-Hurtado N, Yepes-Echeverri MC, García-Loaiza CJ, et al. Post-Chikungunya chronic arthralgia: results from a retrospective follow-up study of 131 cases in Tolima, Colombia. Travel Med Infect Dis. 2016;14:58–9.
- Rodriguez-Morales AJ, Gil-Restrepo AF, Ramírez-Jaramillo V, Montoya-Arias CP, Acevedo-Mendoza WF, Bedoya-Arias JE, et al. Post-chikungunya chronic inflammatory rheumatism: results from a retrospective follow-up study of 283 adult and child cases in La Virginia, Risaralda, Colombia. Version 2. F1000Res. 2016;5:360.
- Rodriguez-Morales A, Cardona-Ospina J, Villamil-Gómez W, Paniz-Mondolfi A. How many patients with post-chikungunya chronic inflammatory rheumatism can we expect in the new endemic areas of Latin America? Rheumatol Int. 2015;35:2091–2094.

Please cite this article as: Rodríguez-Morales AJ, Sánchez-Duque JA, Anaya J-M. Respuesta a: Alfavirus Tropicales Artritogénicos. Reumatol Clin. 2018;14:245–246.

Download English Version:

# https://daneshyari.com/en/article/8742234

Download Persian Version:

https://daneshyari.com/article/8742234

Daneshyari.com