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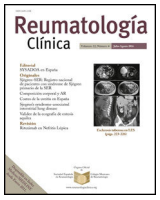

Letter to the Editor

Predictors of Relapse After Corticosteroid Injection for the Treatment of Plantar Fasciitis

Predictores de recaída después de la inyección de corticosteroides para el tratamiento de la fascitis plantar

Dear Editor,

Plantar fasciitis is a common cause of heel pain worldwide, having a high burden on quality of life.[1] Corticosteroid plantar injection (CPI) is a treatment option frequently used, especially when conservative strategies fail. Although efficacy on relieving pain has already been shown,[2,3] data on predictors of relapse are scarce.

The rationale behind this study was to assess the clinical response to CPI and the influence of socio-demographic and clinical factors on the risk of relapse.

This retrospective study included 85 patients from our rheumatology department, with plantar fasciitis who underwent plantar injection with 40 milligrams of methylprednisolone guided either by body landmarks or ultrasound, between 2017 and 2018. Patients with chronic rheumatic inflammatory disorders were excluded. Socio-demographic and clinical information were obtained through the clinical records. Missing data and information about clinical evolution after the CPI were obtained by telephonic survey. Pain was assessed before and after CPI using the visual analogue scale (VAS). Patients were asked to evaluate the efficacy in relieving pain using a Likert scale. Paired sample t-test was used to evaluate the efficacy of CPI on relieving pain. Cox-regression was used to assess predictors of relapse after CPI.

Sixty-nine (81.2%) patients were female and the mean age was 58 ± 12 years. The average body mass index (BMI) was 30.6 ± 4.9 kg/m^2. The mean duration of symptoms before the procedure was 8.0 ± 3.6 months and the mean VAS score of pain was 8.9 ± 1.3 cm. Most CPI (67.1%) were guided by body landmarks. Table 1 summarizes the baseline characteristics. There was a significant reduction in VAS score after the CPI (8.9 vs 1.3 cm, $p < 0.001$), which illustrates the effectiveness of CPI in the treatment of plantar fasciitis, as supported by other studies.[2,3] In fact, most patients agreed (38.8%) or strongly agreed (42.4%) with its effectiveness.

However, after a median follow-up of 19 months (IQR 14–25 months), 42 patients (49.4%) had a relapse of symptoms, on average, 4.9 ± 4.3 months after the procedure, which demonstrates that CPI may only have a short-term efficacy. Nonetheless, VAS score of pain after relapse was significantly lower than the initial VAS (8.9 vs 6.6 cm, $p < 0.001$). Moreover, in this study, time-to-relapse was longer than the 1–3 months-efficacy reported in literature.[3,4]

In univariate analysis, patients who suffered a relapse had a significantly longer duration of symptoms ($p = 0.028$). BMI is considered a risk factor for plantar fasciitis and for recurrence of symptoms.[5] Yet, in this study, BMI did not influence the risk of relapse, which may be explained by the fact that most patients were obese and the sample of subjects with normal BMI was short, therefore influencing the results. Moreover, Tsai et al. reported

Table 1
Baseline characteristics.

Characteristics	All patients (*N* = 85)	Without relapse (*N* = 43)	Relapse (*N* = 42)	*p*
Age (M ± SD) – yr	58 ± 12	60 ± 11	56 ± 12	0.185
Female sex – no (%)	69 (81.2)	33 (76.7)	36 (85.7)	0.290
Coexisting conditions – no (%)				
Diabetes	23 (27.1)	14 (32.5)	9 (21.4)	0.248
Non-smokers	72 (84.7)	34 (79.1)	38 (90.5)	0.220
BMI (M ± SD) – m/kg^2	30.6 ± 4.9	31.2 ± 5.1	30.0 ± 4.6	0.231
Left foot – no (%)	43 (50.6)	21 (48.8)	20 (47.6)	0.732
Initial VAS (M ± SD) – cm	8.9 ± 1.3	8.9 ± 1.2	8.8 ± 1.4	0.934
Duration of symptoms (M ± SD) – months	8 ± 4	7 ± 3	9 ± 4	*p* = 0.028
Previous treatment – no (%)				
None	2 (2.4)	1 (2.3)	1 (2.4)	–[a]
NSAIDs ± physiotherapy	76 (89.5)	38 (88.4)	39 (92.9)	–[a]
Previous CPI	7 (8.2)	4 (9.3)	3 (7.1)	–[a]
Body landmark CPI – no (%)	57 (67.1)	28 (65.1)	29 (69.0)	0.700

BMI: body mass index; CPI: corticosteroid plantar injection; M: mean; no: number; NSAIDs: nonsteroidal anti-inflammatory drugs; SD: standard deviation; VAS: visual analogue scale.

[a] Univariate analyses not performed due to limited number of subjects.

that sonographic guidance was associated with lower recurrence of symptoms,[6] which was not observed in this study. The limited number of subjects in whom CPI was guided by ultrasound may have limited this analysis.

In multivariate analysis, after adjusting for sex and age, the duration of symptoms was an independent predictor of relapse (HR 1.10, 95% CI 1.01–1.20, $p = 0.039$), indicating that CPI could be considered an early approach to plantar fasciitis, instead of a second line option.

In conclusion, in accordance to other studies, CPI was effective in alleviating pain in plantar fasciitis, but relapse was common. Furthermore, even after a relapse, the intensity of the pain was lower. Finally, duration of symptoms was an independent predictor of relapse, highlighting the importance of early diagnosis and treatment of plantar fasciitis.

Compliance with ethical standards

All procedures performed were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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Conflict of interest

None.

References

1. Luffy L, Grosel J, Thomas R, So E. Plantar fasciitis: a review of treatments. J Am Acad Physician Assist. 2018;31:20–4.
2. Li Z, Yu A, Qi B, Zhao Y, Wang W, Li P, et al. Corticosteroid versus placebo injection for plantar fasciitis: a meta-analysis of randomized controlled trials. Exp Ther Med. 2015;9:2263–8.
3. McMillan AM, Landorf KB, Gilheany MF, Bird AR, Morrow AD, Menz HB. Ultrasound guided corticosteroid injection for plantar fasciitis: randomised controlled trial. BMJ. 2012;344:e3260.
4. Mohamed Abdihakin, Wafula K, Hasan S, McLeod J. A randomised controlled trial of steroid injection in the management of plantar fasciitis. SA Orthop J. 2012;11:33–8.
5. Valizadeh MA, Afshar A, Hassani E, Tabrizi A, Rezalo S, Dourandish N. Relationship between anthropometric findings and results of corticosteroid injections treatment in chronic plantar heel pain. Anesthesiol Pain Med. 2018;8:e64357. Available from: http://anesthpain.com/en/articles/64357.html [cited 29.04.20].
6. Tsai W-C, Hsu C-C, Chen CPC, Chen MJL, Yu T-Y, Chen Y-J. Plantar fasciitis treated with local steroid injection: comparison between sonographic and palpation guidance. J Clin Ultrasound. 2006;34:12–6.

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Teleconsulta de reumatología infantil en tiempo de COVID-19

Teleconsultation of Infant Rheumatology in Covid-19 Time

Sr. Editor:

La actual pandemia COVID-19 ha supuesto una transformación total en la forma de atender a los pacientes reumatológicos en consultas externas, también en reumatología pediátrica. La telemedicina ha sido obligatoria durante los peores momentos de la crisis sanitaria, pero se mantendrá una vez recuperemos la normalidad, porque en toda crisis hay una oportunidad. Existen experiencias de teleconsulta en reumatología en adultos[1] y en menor medida en reumatología pediátrica[2] que implican una comunicación telemática con atención primaria. La actual teleconsulta involucra directamente a los pacientes y esta modalidad parece tener buena aceptación[3]. El objetivo de nuestra carta es mostrar nuestros resultados de una teleconsulta de reumatología pediátrica durante la pandemia.

Durante los meses de marzo, abril y mayo de 2020 realizamos asistencia telefónica en la gran mayoría de los pacientes citados con una entrevista semi-estructurada. Durante cada llamada se preguntó a los padres de los pacientes o a los propios pacientes cuando eran mayores de 14 años por síntomas de dolor o inflamación articular y sobre cualquier síntoma relacionado con su enfermedad de base. En el caso de la artritis idiopática juvenil (AIJ) se consideró en remisión cuando se respondía que el niño hacía vida normal, sin dolor, inflamación ni cojera. Cuando se expresó la presencia de dolor o inflamación u otra causa justificada, se citó presencialmente al paciente en la siguiente fecha de consulta disponible.

Se realizaron un total de 147 consultas de las cuales 110 (75%) fueron telefónicas. Los diagnósticos de los pacientes atendidos y sus datos demográficos se presentan en la tabla 1. Solo nueve pacientes (8,2%) expresaron encontrarse mal y se necesitó asignar una consulta presencial en 13 casos (11,8%). El tiempo medio entre la consulta previa (10,7 semanas) fue similar al tiempo de la siguiente cita asignada telefónicamente (11,5 semanas). En AIJ se hicieron 34 consultas telefónicas y 14 revisiones presenciales. En 32 casos (94,1%) los niños estaban asintomáticos, sin embargo, ocho pacientes (23,6%) necesitaron una consulta presencial en las ocho semanas siguientes.

La inmensa mayoría de los pacientes se mostraron agradecidos con la teleconsulta y referían que los pacientes se encontraban bien o muy bien, sin embargo, tras una o dos llamadas algunos padres expresaron la necesidad de ser atendidos presencialmente, aunque el niño estuviera asintomático. En la consulta de reumatología pediátrica hemos propuesto un formato de consultas presenciales intercaladas con consultas no presenciales. Esto permitirá distanciar entre sí las consultas presenciales evitando la aglomeración de pacientes en la sala de espera sin necesidad de reducir el número de pacientes atendidos por consulta. No debemos descuidar las consultas presenciales, especialmente en el seguimiento de la AIJ, donde la exploración articular sistemática es esencial porque la inflamación puede pasar desapercibida para pacientes y padres.