

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Reumatología Clínica



www.reumatologiaclinica.org

Letter to the Editor



Teleconsulta de reumatología infantil en tiempo de COVID-19

Dear Editor,

The current COVID-19 pandemic has completely transformed the care of rheumatology patients in outpatient clinics, including paediatric rheumatology. Telemedicine has been mandatory during the worst moments of the health crisis, and will be maintained once normality returns, because in every crisis there is an opportunity. Teleconsultation in adult rheumatology¹ and to a lesser extent in paediatric rheumatology² has occasionally involved telematic communication with primary care. Current teleconsultation involves patients directly and this method appears to have been well received.³ In this letter we show our results from paediatric rheumatology teleconsultation during the pandemic.

During the months of March, April and May 2020 we provided telephone support to the vast majority of patients who were given an appointment using a semi-structured interview. During each call we asked the patients' parents, or the patients themselves if they were over 14 years of age, about symptoms of joint pain or inflammation and any symptoms related to their underlying disease. In the case of juvenile idiopathic arthritis (JIA), the child was considered to be in remission if they answered that they were living a normal life without pain, swelling or limping. If they reported pain or swelling or for any other justified cause, the patient was given an appointment to attend the next available consultation in person.

Table 1

Demographics of the patients seen in March, April and May 2020.

	Total (n: 147)
Mean age in years (SD)	8.9 (4.3)
Female gender (%)	92 (62.6)
JIA n (%)	48 (32.7)
SLE/Sjögren's/JDM n (%)	13 (8.8)
Arthralgias n (%)	29 (19.7)
Other diagnoses n (%)	36 (24.5)
Face-to-face consultation n (%)	37 (25)
Telephone consultation n (%)	110 (75)

JDM: juvenile dermatomyositis; JIA: juvenile idiopathic arthritis; SD: standard deviation SLE: systemic lupus erythematosus. There was a total of 147 consultations, of which 110 (75%) were by telephone. The diagnoses of the patients seen and their demographic data are presented in Table 1. Only nine patients (8.2%) reported feeling unwell and a face-to-face consultation was required in 13 cases (11.8%). The mean time from the previous consultation (10.7 weeks) was similar to that of the next telephone appointment (11.5 weeks). In JIA there were 34 telephone consultations and 14 face-to-face check-ups. In 32 cases (94.1%) the children were asymptomatic, however, eight patients (23.6%) required a face-to-face consultation in the following eight weeks.

The vast majority of patients were grateful for the teleconsultation and reported that they were well or very well. However, after one or two calls some parents expressed the need to be seen in person, even if the child was asymptomatic. In the paediatric rheumatology practice we propose a format of face-to-face consultations interspersed with non-face-to-face consultations. This will allow us to distance face-to-face consultations from each other, avoiding patients crowding together in the waiting room without having to reduce the number of patients seen per consultation. Face-to-face consultations should not be neglected, especially in the follow-up of JIA, where systematic joint examination is essential as inflammation may go unnoticed by patients and parents.

Conflict of interests

The authors have no conflict of interests to declare.

References

- Tejera Segura B, Bustabad S. Una nueva forma de comunicación entre reumatología y atención primaria: la consulta virtual. Reumatol Clín. 2016;12: 11–4.
- Henrickson M. Policy challenges for the pediatric rheumatology workforce part III. The international situation. Ped Rheumatol. 2011; 9:26.
- **3.** Agha Z, Schapira RM, Laud PW, McNutt G, Roter DL. Patient satisfaction with physician-patient communication during telemedicine. Telemed J E Health. 2009;15:830–9.

[☆] Please cite this article as: Nieto-González JC, Monteagudo I. Teleconsulta de reumatología infantil en tiempo de COVID-19. Reumatol Clin. 2022;18:379–380.

Juan Carlos Nieto-González,* Indalecio Monteagudo

Servicio de Reumatología, Hospital General Universitario Gregorio Marañón, Madrid, Spain * Corresponding author. E-mail address: juancarlos.nietog@gmail.com (J.C. Nieto-González).

https://doi.org/10.1016/j.reumae.2020.09.004 2173-5743/ © 2021 Published by Elsevier España, S.L.U.

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 $30.6 \pm 4.9 \text{ kg/m}^2$. 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 land-

Table 1

Baseline characteristics.

marks. 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 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.

Characteristics	All patients (N=85)	Without relapse (N=43)	Relapse (<i>N</i> = 42)	р
$Age (M \pm SD) - yr$	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
$BMI(M \pm SD) - m/kg^2$	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 $(M \pm SD) - cm$	8.9 ± 1.3	8.9 ± 1.2	8.8 ± 1.4	0.934
Duration of symptoms ($M \pm SD$) – months	8 ± 4	7±3	9 ± 4	<i>p</i> = 0.028
Previous treatment – no (%)				
None	2(2.4)	1(2.3)	1(2.4)	_a
NSAIDs \pm 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.