

## What a knee pain, doctor! Pellegrini-Stieda Syndrome

### *¡Doctor, qué dolor de rodilla! Síndrome de Pellegrini-Stieda*

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#### **Abstract:**

The Pellegrini-Stieda sign is a radiological sign that represents proximal calcification of the medial collateral ligament of the knee. Occurs after direct or indirect trauma to the knee. The associated symptoms of pain and limitation of the functional range is what is known as Pellegrini-Stieda syndrome. Radiologically diagnosed, it is a recognizable condition in our primary care services. For this reason, and thus being able to carry out better treatment and guidance in referral to a specialist, the case is presented for review.

**Key words:** Knee; Knee Medial Collateral Ligament; Ossification.

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Figure 1. Standing X-rays of both knees. Soft tissue edema. Suggestive signs of gonarthrosis, greater impingement at the medial level. Calcification in medial collateral ligament insertion.

### Resumen:

El signo de Pellegrini-Stieda es un signo radiológico que representa la calcificación proximal del ligamento colateral medial de la rodilla y que ocurre después de un traumatismo de la rodilla. La clínica asociada es dolor y limitación del arco funcional, se conoce como síndrome de Pellegrini-Stieda. Es un diagnóstico radiológico, reconocible en consultas de atención primaria. Por esta razón, y con el fin de poder realizar un tratamiento y orientación más efectivos al referir a otro especialista, se presenta el caso para su revisión.

**Palabras clave:** rodilla, ligamento colateral medial, osificación

### Background

The medial collateral ligament of the knee is one of the four major ligaments stabilizing the joint,<sup>1,2</sup> and it is the most frequently injured as found in a ten-year study researched by Andrews et al.<sup>1</sup> When ossification or calcification of the proximal portion of this ligament appears after a trauma, it is called the sign of Pellegrini-Stieda.<sup>1-4</sup> Radiologically diagnosed it is a frequent and easy pathology to identify daily basis medical attention. For optimal management it requires an early diagnosis.<sup>2</sup>

### Case

A 55-year-old woman came for persistent inflammation and pain in her right

knee, after a seemingly trivial trauma a month and a half ago (a fall from her own height). Physical examination revealed inflammation, anterior knee pain, and a positive brush and Zohlen's sign. The rest was normal. She was evaluated in the emergency room where the following x-ray were taken, with the diagnosis of suggestive findings of Pellegrini-Stieda syndrome.

Taking advantage of the fact that the patient was in our medical room, it was decided to extend the study by doing an ultrasound.

Conservative treatment was prescribed, and the patient was referred to Traumatology for evaluation and follow-up.

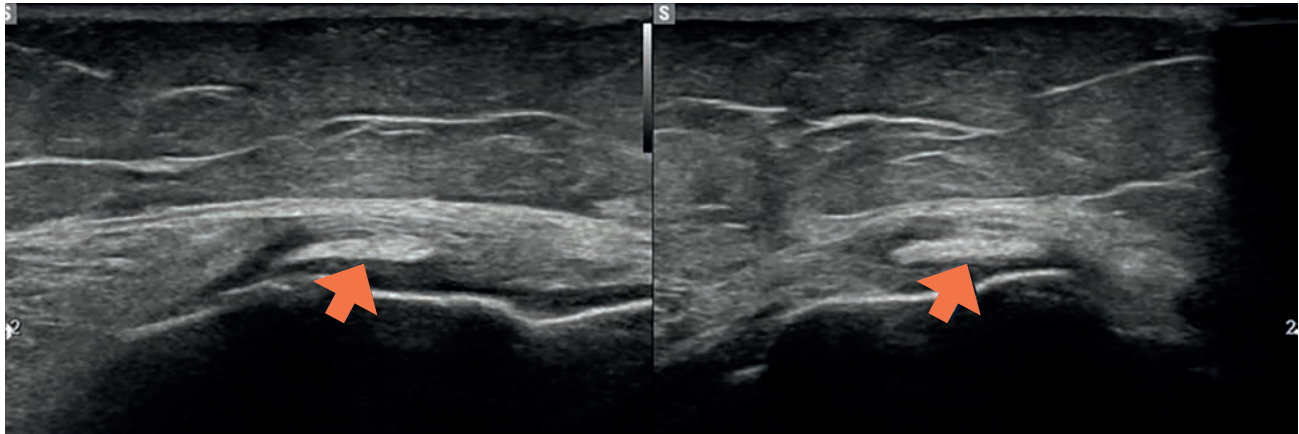


Figure 2. Right knee ultrasound. Mild bursitis. Calcification in the medial collateral ligament.

### Discussion and conclusion

The Pellegrini-Stieda sign is the calcification of the medial collateral ligament of the knee, occurring after trauma to the knee.<sup>3,4</sup> When symptoms of pain and restriction of the range of motion are added to this radiological finding, it is called Pellegrini-Stieda syndrome.<sup>3,4</sup> It is also usually associated with inflammation of the joint, which can simulate arthritis.<sup>4</sup>

This syndrome takes its name from two surgeons, Pellegrini, who in 1905 described this sign for the first time, and Stieda who in 1908 reported the first five cases.<sup>3,4</sup>

It is usually more common among men between 25 and 40 years old. Soft tissue calcification usually appears 3-4 weeks after the trauma, which can stabilize or even disappear.<sup>3,4</sup>

The diagnosis is made by Xray findings where a linear or curved calcification is observed from the insertion of the medial collateral ligament.<sup>3</sup> Nevertheless, imaging tests can be complemented with ultrasound and magnetic resonance imaging for a better assessment of the degree and evolution.

Treatment is usually conservative, although in cases with significant limitation of mobility or significant

involvement of the ligament, it would be surgical.<sup>3,4</sup> However, in the latter, recurrence is relatively common.<sup>4</sup>

### Authors contribution:

M G-C: Conceptualization, bibliography review and analysis, development, and writing; A C-G: Bibliography review and analysis, development and writing, and correction of the text. All authors approve the publication of this writing.

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### Conflicts of interest:

Authors declare that they have no conflicts of interest.

### References

1. Andrews K, Lu A, Mckean L, Ebraheim N. Review: Medial collateral ligament injuries. *J Orthop.* 2017;14(4):550-554.
2. Lee CH, Tan CF, Kim O, Suh KJ, Yao MS, Chan WP, Wu JS. Osseous Injury Associated With Ligamentous Tear of the Knee. *Can Assoc Radiol J.* 2016;67(4):379-386.
3. Restrepo JP, Pilar-Molina M. Síndrome de Pellegrini-Stieda: más allá que un signo radiológico. *Rev Colomb Reumatol.* 2016;23(3):210-212
4. Santos Sánchez JA, Pascua-Ramos LR, García-Casado D, Bermúdez-López C. Síndrome de Pellegrini-Stieda como causa de gonalgia. *Semergen.* 2012;38(8):543-547.