

LETTER TO THE EDITOR

[Translated article] Letter to the Editor: “Suprapatellar tibial nailing, why have we changed?”



Carta al Director: «Enclavado de tibia suprapatelar, ¿por qué hemos cambiado?»

Dear Editor,

We read with great interest the article published by Rodríguez-Zamorano et al.¹ “Suprapatellar tibial nailing, why have we changed?” published in the May–June 2022 volume. This is a retrospective study comparing 22 tibial fractures nailed through a suprapatellar approach and 30 through a transtendinous infrapatellar approach. The change to the suprapatellar technique resulted in improved functional outcomes without increasing complications with respect to the previously used IP approach, supporting the current trend in trauma units towards the use of this technique due to its multiple advantages.

Our experience and the available literature coincide in the multiple disadvantages associated with the infrapatellar approach mentioned by the authors.^{1,2} These are technical disadvantages related to the need to maintain a high degree of flexion in the knee to insert the implant: difficulty in intra-operative radiological control of both the reduction and the nailing, malalignment in extension in proximal fractures and difficulty in the application of percutaneous reduction techniques. All this leads to greater discomfort for the surgeon, resulting in longer operative times.

Although this is a retrospective study, the investigators have done a very commendable job in collecting and analysing the most relevant variables when comparing the two approaches. A notable improvement in mid-term IKDC score was observed when using the suprapatellar approach with respect to the infrapatellar approach (88.5 vs. 69.0; $p < .01$). This result is in line with the recent meta-analysis published by Sepehri et al.,³ where they associated the use of the SP approach with a significant improvement in Patient Reported Outcomes. However, Rodríguez-Zamorano et al. found no differences between the two techniques in Lysholm

Knee Score or Return-to-Sport rate. The absence of significant differences in these and other variables is attributable to the limited statistical power of the study, which is due to its small sample size.

We also found other important limitations in terms of sample and group configuration. On the one hand, there was no randomisation, as the inclusion of patients in one or other treatment group was done “at the discretion of the treating surgeon”. On the other hand, although the homogeneity of both groups was investigated in terms of the baseline characteristics of the patients, it was not determined that they were comparable in terms of the type of fracture and context in which the injuries occurred. Also noteworthy is the inclusion of only four fractures of the proximal tibia; a more contrasted indication for the suprapatellar technique. All these facts may constitute sources of selection bias.

Finally, we congratulate the authors and the journal for this interesting publication, the results of which coincide with our experience. At our institution, the suprapatellar approach is the technique of choice to treat all tibial fractures that require nailing. In the last decade, we have performed more than 300 suprapatellar nailing procedures on tibial fractures. The recent review of our caseload, pending dissemination, corroborates our full satisfaction with this technique in terms of ergonomics, clinical results, and radiological parameters.

Level of evidence

Level of evidence V.

References

1. Rodríguez-Zamorano P, García-Coiradas J, Galán-Olleros M, Marcelo Aznar H, Alcobia-Díaz B, Llanos S, et al. Enclavado de tibia suprapatelar ¿por qué hemos cambiado? Rev Esp Cir Ortopédica Traumatol. 2022;66:159–69. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1888441521001363>
2. Packer TW, Naqvi AZ, Edwards TC. Intramedullary tibial nailing using infrapatellar and suprapatellar approaches: a systematic review and meta-analysis. Injury. 2021;52:307–15. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0020138320307816>
3. Sepehri A, You D, Lobo AA, Schneider P, Lefavre KA, Guy P. Comparison of Patient-Reported Outcomes

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After Suprapatellar Versus Infrapatellar Nailing Techniques for Tibial Shaft Fractures: A Systematic Review and Meta-analysis. J Orthop Trauma. 2022;36:e208–14
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