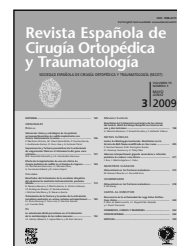




Revista Española de Cirugía Ortopédica y Traumatología

www.elsevier.es/rot



COMMENTARY

Osteosíntesis en las fracturas malolares*

Internal fixation of ankle fractures

This paper presents the authors' preliminary experience of surgical treatment of malleolar fractures; it stresses the importance of anatomic reduction of the tibial malleolus and presupposes that restoration of the latter to its anatomic position also entails restoration of the talus and the calcaneus, which normalizes the function and biomechanics of the ankle joint. They state that use of Vitallium® screws and antibiotics drastically minimizes the risk of infection and metal intolerance.

All their cases, except for one where they use intramedullary fibular nailing, they only operate the tibial malleolus and apply subsequent cast immobilization for 6 weeks. They do not specify whether, in addition to surgical reduction and screw fixation of the tibial malleolus, they manipulate and reduce the fibular fracture. In all cases cast immobilization is applied for 6 weeks, which is the usual period for conservative treatment in this type of fracture. Nor is any information given on the tibiofibular diastasis arising from fibular displacement or on the potential injury to the tibiofibular ligament or syndesmosis. Only functional and resumption of employment data are provided.

Although the study contains no bibliographical references, the authors cite two previous publications (Boppe and Vassitch, and Patoir). One of them emphasizes the urgency of treatment while the other refers to the poor results afforded by surgery in the first cases treated.

It is surprising to note that although at least 3 editions of a Spanish translation of the treatise by Böhler had already been published, describing malleolus and ligament injuries (although only conservative treatment is applied), the study by Salaverri and Gorostidi does not mention the tibiofibular syndesmosis or the tibiofibular ligament¹. Around the same time, Lauge-Hansen published his classification which is still in use, together with Danis-Weber's subsequent scale^{2,3}. Nonetheless, although mention was made of tibiofibular syndesmosis injury, Böhler only extended immobilization from 6 to 12 or 18 weeks in cases with a clear opening of the tibiofibular mortise and did not insist on how crucial it was to restore the length of the fibula and of the syndesmosis¹. However, the treatise by Sanchís Olmos, which specifically alludes to external rotation injuries and to the restoration of the tibiofibular mortise by medially displacing the fibula

without supinating the ankle, points out that surgery is rarely necessary and that it suffices to extend the cast proximally beyond the knee and keep it in place for at least 8 weeks⁶.

Currently it is unthinkable for a study of this nature to be submitted for publication, but 60 years ago the mere fact of attempting it required a significant effort since access to medical literature was extremely limited. Studies in the field of Orthopedic and Trauma Surgery started to appear with some regularity in the publications of the Spanish Society of Orthopedic and Trauma Surgery (SECOT), and sporadically in some surgical journals, whose readership was very limited. In addition, very few scientific meetings or congresses were organized and travel and the exchange of experiences were quite uncommon. Very few specialists travelled abroad and contributed innovations to standard practice.

Against this backdrop, the publication of this study, which had its groundbreaking side in that it considered the surgical treatment of a kind of fracture that was up to then treated only conservatively, constitutes a landmark in our field. The authors also had to face the criticism of their colleagues (most of them followers of Böhler) who remained highly skeptical until the ideas of Danis on surgical treatment became known thanks to the systematization carried out by the Association for the Study of Osteosynthesis (AO)⁵. Likewise, the treatise published by Watson-Jones a few years later already introduced the idea of restoring the tibiofibular mortise by means of a screw in patients with this condition⁴.

Currently, few ankle fractures are treated conservatively, except for undisplaced ones. Earlier authors systematized their knowledge on the basis of a careful analysis of their cases and, above all, of their failures. In addition to this, use of a meticulous soft tissue-sparing technique, antibiotic prophylaxis and well developed and manufactured implants make it possible to achieve consistent and reproducible results. This conclusion is reached thanks to the contribution of those who have preceded us, among them the authors of this paper and other scholars mentioned in this Commentary.

References

1. Böhler L. Técnica del tratamiento de las fracturas. Vol II, 3 ed. Barcelona: Labor; 1942. p. 1301-72.

2. Danis R. Théorie et pratique de l'osthéosynthèse. Masson et cie, 1949.
3. Lauge-Hansen N. Fractures of the ankle. Analytic historic survey as the basis of new experimental, roentgenologic, and clinical investigations. Arch Surg. 1948;56:259-317.
4. Lauge-Hansen N. Watson-Jones R. Fracturas y traumatismos articulares. Barcelona: Salvat editores; 1957. p. 815-62.
5. Müller ME, Algöwer M, Schneider R, Willenegger H. Manual de osteosíntesis. Ed. Científico-Médica, 1971. [(1.o edición en alemán, Springer-Verlag, 1970)]
6. Sanchís Olmos V. Fracturas y otras lesiones traumáticas. Ed. Científico-Médica, 1963.

E. Gil Garay

*Department of Orthopedic Surgery, La Paz University
Hospital, Madrid, Spain*