## Reply to "Response to Management of Splenic Injuries Utilizing a Multidisciplinary Protocol in 110 Consecutive Patients at a Level II Hospital"



Réplica a «Respuesta a resultados en el tratamiento de traumatismos esplénicos utilizando un protocolo multidisciplinar en 110 pacientes consecutivos en un hospital de nivel II»

Dear Editor:

First of all, we would like to thank Sánchez Arteaga et al<sup>2</sup> for their comments about our study on the management of splenic trauma in a level II hospital. After carefully reading their observations, we indeed agree that non-surgical treatment is the treatment of choice in hemodynamically stable patients with grade IV and even grade V splenic injuries, as defined by the American Association for the Surgery of Trauma<sup>3</sup> (AAST) score. This includes including angioembolization as the most appropriate initial technique, which has been shown to be a safe procedure with high rates of effectiveness and organ preservation.<sup>4</sup>

Despite these initial considerations, and as we have mentioned in our article, Interventional Radiology services were not available 24/7, and we were restricted to their working hours. As correctly indicated, it is striking that patients were not referred given the proximity of the referral center, but this is due to several factors that occurred over the years of this protocol, including: excessive professional zeal, unawareness of said possibility, and mainly, the politically convulsive years of hospital fusion and de-fusion that took place in Granada. We are pleased to indicate that this is not currently the case, and both hospitals now have shared Interventional Radiology services available daily.

For this reason, our study highlights a high cumulative volume compared to other spleen-preserving surgery series. We will take this into consideration as the subject of future publications, either by carefully analyzing the results individually or, more broadly, by dealing with confounding biases and identifying their causes through discriminant analysis or classification and regression trees (CART) developed in propensity score matching studies.

Furthermore, we would like to clarify that the possible explanation for the high mean hospital stay reported was mainly due to the fact that 27% of the treated patients were multiple-trauma patients, presenting the involvement of several organs and bone fractures of diverse complexity. In the remaining cases, the lack of standard criteria could explain

the lengthy hospital stay, based on individual professional experiences and obsolete theories.

In short, the idea of developing a protocol to establish a flow of patients and therapeutic options was born with the aim to resolve these previously discussed factors, thereby unifying criteria and therapeutic approaches. All of this was achieved by adjusting the patient type and adapting to the resources available at the time, always with an eye on international standards.<sup>5</sup>

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