

## LETTER TO THE EDITOR

### [Translated article] Hip fracture as a time-dependent process



### La fractura de cadera como proceso tiempo-dependiente

Dear Editor,

We read with great interest the recently published work by Balvis-Balvis et al.<sup>1</sup> on the improvement in the quality of care of the hip fracture process following the implementation of an orthogeriatrics programme, showing not only a notable improvement in mortality and functionality, but also in cost-effectiveness, with a notably significant reduction in the costs inherent in the process. While the model of shared care management adopted between an orthopaedic surgeon and a general practitioner in the hip fracture process is indisputable, we have no doubt that it also is for any elderly hospitalised patient and/or comorbidity in an orthopaedic and trauma surgery ward, whatever the process may be, in line with other studies.<sup>2</sup> The ageing of the population is accompanied by an increase in complexity, frailty and polypharmacy of patients undergoing surgery, including elective surgery. It has been shown that the complexity of patients in surgical units has already caught up with those hospitalised in medical units,<sup>3</sup> so it seems reasonable to assume that they need similar care.

Unlike programmed surgery, in a hip fracture it is difficult to optimise patients before urgent surgery, as it is a process with high blood losses and with high haemotherapy support needs. Blood-saving strategies have been developed based on antifibrinolytic treatments, such as tranexamic acid, the use of erythropoietin or intravenous iron; while optimising a patient may require a haemoglobin threshold to avoid cardiopulmonary complications in the immediate postoperative period, it is possible that by implementing a transfusion management programme for the operated patient,<sup>4</sup> the results shown by Balvis et al. could be better in terms of blood saving.

Another aspect which attracts attention when evaluating the outcome indicators is the discreet improvement in patients operated on early, in the first 48 h, which,

as is well known, is an indicator of quality of care, given that it has an impact on the morbidity and mortality of patients who suffer a hip fracture.<sup>5</sup> Although the authors mention it in the discussion, the causes of surgical delay are not reflected. We believe that beyond instability or the need for optimisation of the patient before surgery, or antiplatelet/anticoagulation that would prevent timely surgery, the highest percentage of surgical delay is due to structural/organisational reasons, such as admission at weekends, the lack of an operating theatre or the simple fact of not being considered a truly urgent process.

We present an observational, retrospective and multicentre study, the aim of which was to compare the rate of early hip fracture surgery (<48 h) before and after carrying out an external audit process based on peer review (RPP), analysing the clinical records of those hip fractures in patients > 65 years of age operated on after 48 h in the hospitals audited by a multidisciplinary team of external evaluators, focusing on the causes of surgical delay. A total of 244 patients who did not undergo early intervention were reviewed, corresponding to 11 hospitals within the Quironsalud Group. The causes of surgical delay were: structural/organisational (119; 48.7%), anti-aggregate/anticoagulated patients without justification for delay (46; 18.8%), anti-aggregate/anticoagulated patients with justification for delay (50; 20.5%), medical complications with need for optimisation (27; 11.1%) and others (2; 0.9%). The rate of early surgical intervention improved in the audited hospitals, from 58% in pre-PPR 2017 to 79% post-PPR 2020,  $p < .001$ , with an RRR of 65.1% (95% CI 48.3–83.6%).

We believe that the analysis of health indicators should be part of the quality culture of healthcare organisations. Although the management model based on shared care between surgeons and general practitioners has a favourable impact on health outcomes, these would be better, firstly, if there were support from the institution to minimise structural and organisational barriers; and secondly, if the process of hip fracture were understood as a time-dependent process, with the aim of reducing the morbidity and mortality of the patients who suffer from it.

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## Level of evidence

Level of evidence III.

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