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Beware of Hip Fractures in the Elderly [Response to Letter]

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Dear editor

We would like to thank He Cao and Xiaoying Liu from Shanghai[1] for their interest and commentary regarding our publication "Clinical and Demographic Characteristics of Centenarians versus Other Age Groups Over 75 Years with Hip Fractures" published in Clinical Interventions in Aging.[2]

First, the letter states: "We have to take into account that different age groups experience different types of fractures, so that radius fractures are more frequent in younger women around 60 years of age. Vertebral fractures appear in slightly older women, in the 70s, and fractures of the limbs and hips in older women (octogenarians). The interpretation of this fact is based on the way each individual reacts to falls. Younger people react by supporting their hands when they fall, and older women who suffer hip fractures tend to be more frail patients who suffer falls and, not having the reflex to support their hands, fall sideways and hit their hips. In this study we have not recorded acute diseases on admission in order to study whether which are more common, or if there are significant differences between age groups".[3,4]

We agree that caregiver-related factors could influence outcomes. However, our study focused on describing the clinical characteristics and immediate outcomes of hip fractures in persons aged 75 years and older, using data from the Spanish National Hip Fracture Registry (RNFC), which does not include caregiver factors. The measurement of quality of life through scales, such as EQ-5D, as suggested by He Cao and Xiaoying Liu, has been included in some other international audits and would in our opinion also be valuable to assess. It is possible it may be included in the RNFC in the future.

Second, the greater percentage of women in older age groups is well known and has been documented in the literature, due to womens' longer life expectancy compared to men and the higher overall prevalence and incidence of osteoporotic fractures in women than in men. We acknowledge that adjustment for this population-based difference could provide greater precision in future studies. Our aim was to provide a descriptive analysis of the characteristics of hip fracture patients according to their age group, and although we did not correct for the relative longevity of women, this bias is constant in studies analyzing older age groups.

Third, as mentioned above, our study focused on RNFC data and did not specifically address long-term quality of life, nor did it compare conservative versus surgical treatments. Surgical treatment of hip fractures has been shown to reduce the risk of mortality in centenarians,[5] compared to those managed non-operatively, as also occurs in younger age groups. In our study, 60% of centenarians could walk with assistance one month after the fracture. Undoubtedly, the functional

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and vital prognosis of patients treated surgically is better than those treated nonoperatively (which entails immobility, pain, higher risk of pressure sores, infections, aspiration pneumonia, functional decline, increased burden of care, institutionalization, and greater mortality).

The multivariate analysis in our study was unable to find an association between the type of surgery performed and 30 day-mortality. We found that their prefracture medical condition was a prognostic factor and, thus, we believe the assessment of surgical risk becomes even more important in this age group. The involvement of geriatricians in this decision-making process is crucial in the oldest old, as is taking into account the patient's rights and wishes.

Thank you for taking the time to read our research and give thoughtful feedback on our paper.

Disclosure

The authors report no conflicts of interest in this communication.

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