Comments on Min et al.: Effects of anti-osteoporosis medications on radiological and clinical results after acute osteoporotic spinal fractures: a retrospective analysis of prospectively designed study

J. Zhou¹ · X. Huo¹ · Y. Xue¹

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Dear Editor,

We read with great interest the article by Min et al. [1]. In their study, the authors found that for patients with osteoporotic spinal fractures (OSFs), teriparatide showed better improvements compared with bisphosphonates or non-anti-osteoporosis therapy with regard to numerical rating scale, vertebral height loss and incidence of intravertebral cleft (IVC). We wish to express our opinion on this research.

First, the authors said alendronate ($n = 50$) and risedronate ($n = 16$) were used in group II; however, the dosage and frequency of administration were not given in the study. In addition, better efficacy of alendronate in bone mineral density compared with risedronate for osteoporosis patients has been proved [2]. Hence, two different types of bisphosphonates enrolled in one group may lead to potential bias. Second, the supplementation of calcium and vitamin D was not mentioned in the study. For patients with osteoporosis, total daily intake of 1000–1200 mg of calcium and 800–1000 IU of vitamin D was recommended by the National Osteoporosis Foundation [3]. Therefore, if patients received calcium and vitamin D supplementation in this study, it is necessary to report the details about it among the three groups. Finally, according to the authors' previous study, the presence of IVC was confirmed within 6 months following diagnosis [4]. But in the

current study, the maximum follow-up period was 3 months after diagnosis, which was too short to evaluate adequately the incidence of IVC as well as clinical and radiological outcomes for patients with OSFs. In a word, if these concerns were addressed, the conclusions of this retrospective study would be more credible.

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Compliance with ethical standards

Conflicts of interest None.

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J. Zhou and X. Huo contributed equally to this work.

✉ Y. Xue
xueyuanzy@163.com

¹ Department of Orthopaedic Surgery, Tianjin Medical University General Hospital, Heping District, Tianjin 300052, China

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