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LETTER TO THE EDITOR

Comment on article by Chechik et al.: Surgical approach for open reduction and internal fixation of clavicle fractures: a comparison of vertical and horizontal incisions

Hang Li[1] · Longfeng Wang[1] · Hui Wang[1]

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Dear Editor,

In a recent issue of International Orthopaedics, Ofir Chechik and his workmates published an article [1] entitled "Surgical approach for open reduction and internal fixation of clavicle fractures: a comparison of vertical and horizontal incisions", which we read with great interest. We congratulate the authors for their efforts. In this study, the investigators compare the results of clavicle fracture open reduction internal fixation (ORIF) with a standard horizontal incision versus a vertical incision. They found that a vertical incision results in shorter scars but may be associated with increased incidence of haematomas. In addition, the results of this study is that functional outcomes and major complications are similar with both surgical approaches. However, we have several opinions and suggestions that we would like to communicate to the investigators.

1. As we know, in the department of emergency or orthopaedics, clavicle fractures were a common injury, constituting 2.6–10% of all fractures and 35–44% of all shoulder girdle injuries. And the common open reduction internal fixation (ORIF) surgical approach to the clavicle is a horizontal incision along the long axis of the bone [2]. However, in recent years, due to the current surgical treatment of clavicular fractures being relatively routine and simple, there have been relatively few research articles on the surgical treatment of clavicle fractures. In this study, the authors compared the pros and cons of the two surgical approaches, thus the study was very meaningful. But we have some questions in the design of the research. First of all, in the process of reading this article, we cannot tell whether this article belongs to randomized controlled trial or retrospective cohort study. According to the content of the research, we feel that the article is like a RCT study, but the research does not use reasonable random distribution methods, such as the commonly used envelope method or random number table method. Second, in the method of research, we only saw the exclusion criteria for the study samples but did not see the inclusion criteria.
2. During the study, the surgical procedure was performed by different surgical groups, and the internal fixation plate was also provided by different companies. These are also the extra variables in the study. In this study, the researchers used only three months as the shortest follow-up time. It is well known that the follow-up of fracture treatment is generally around 12 months. At three months of follow-up, it was difficult to compare the difference in fracture healing and functional recovery between the two surgical procedures. Although the authors have some understanding of these shortcomings, they have not corrected them in this research process. In addition, there is a word error in the article that I hope can be corrected. From the eigth line of the first paragraph of Introduction, "the application of our self-designed clavicle reductor". Whether it should be expressed as "the application of their self-designed clavicle reductor".

Through this study, we learned that patients with higher requirements for cosmetic outcome can choose a vertical incision, but vertical incision may be associated with increased incidence of haematomas. We once again thank the authors for their contributions and hope that there will be more and better researches in this area.

✉ Hang Li
lihangssb123@126.com

[1] Department of Orthopaedic Surgery, The First People's Hospital of Xiaoshan Hangzhou, No. 199, Shixin South Road, Xiaoshan District, Hangzhou, Zhejiang, China

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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