Comment on Schuh et al.: Angular correction and complications of proximal first metatarsal osteotomies for hallux valgus deformity

Yi He · Dan Peng

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To the Editor,

In this meta-analysis, Schuh et al. [1] compared correction of intermetatarsal and hallux valgus angles and complications of proximal crescentic, Ludloff, proximal opening wedge, proximal closing wedge, proximal chevron and other proximal first metatarsal osteotomies. They found that there was a mean correction of hallux valgus angle of 20.1° [confidence interval (CI) $18.7\text{--}21.4$] and of intermetatarsal angle of 8.1° (CI $7.7\text{--}8.9$). The overall complication rate reached 18.7 %. It is a valuable study. Nevertheless, there are some comments we would like to raise related to this article.

1. The authors included 62 primary studies eligible for meta-analysis. However, we found several repeated studies in the meta-analysis (Table 1). Coughlin et al. reported their studies about proximal crescentic osteotomy [2, 3] twice in 2005 and 2007. Lee et al. also reported their studies about proximal chevron osteotomy [4, 5] twice from 2007 to 2008, and Sammarco et al. reported about proximal chevron osteotomy [6, 7] twice in 1993 and 1995. Schuh et al. included all these studies in their meta-analysis. In our opinion, some repeated data might exist among their studies [2–7]. To solve these problems, we suggest that these studies [2, 4, 6] should be excluded from the meta-analysis.
2. Publication language was limited to English and German in the meta-analysis. Therefore, the authors should mention the potential importance of language bias in the limitations of their meta-analysis.
3. The authors described that “funnel plots were drawn to check for publication bias. Inspection of the funnel plots

showed no sign of publication bias.” However, we cannot find the funnel plots in the paper. The author should provide us all the funnel plots.

We agree with the following conclusions of the authors, i.e. the proximal crescentic osteotomy provided the highest amount of HVA correction. However, regarding angular correction as well as complications, the proximal chevron osteotomy revealed the most favourable results. Rigid fixation is mandatory in order to reduce complications, and further high-quality prospective comparative studies are required and might change the observed effects.

Conflict of interest There is no conflict of interest and the paper has not been submitted elsewhere.

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Y. He · D. Peng (✉)

Department of Orthopaedics, The Second Xiangya Hospital,
Central South University, Changsha, Hunan 410011,
People's Republic of China
e-mail: pengd133@126.com