Reply to the comments on Hsu et al.: Surgical treatment of syndesmotic diastasis: emphasis on effect of syndesmotic screw on ankle function

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On behalf of all the authors, we are thankful for the interest and comments by van Zuuren et al. [1] on our study [2]. In the literature, primary osteoarthritis (OA) of the ankle is uncommon [3]. In orthopaedic clinics, patients treated for ankle OA are usually trauma causes [4]. Post-traumatic OA of the ankle may be caused by direct cartilage damage or malalignment [5]. Theoretically, the latter reduces the joint contact areas and maximizes stresses [6]. Syndesmotic diastasis (SD) in our patients was on average 3.8 mm. Therefore, the risk for ankle OA is high. Although ankle function may seem to be satisfactory for 19 months, progressive deterioration is very possible. Prevention of SD recurrence should be more critical than prevention of screw breakage. Broken screws left in situ may still achieve satisfactory ankle function [7, 8].

Therefore, our response to the queries is as follows:

1. The sample size in our study should be enlarged to achieve, statistical significance. Delayed removal of the syndesmotic screw to prevent SD recurrence becomes more convincing.
2. Bray's scoring used in our study is for its simplicity and convenience. The rating system by the American Orthopedic Foot and Ankle Society is more common [9]. It may be used, but is more complex.
3. Yes, to detect recurrence of SD, tibiofibular overlap is both convenient and useful [10].

4. Theoretically, long-term follow-up of progression of ankle OA is promising. Prevention of SD recurrence is more critical than prevention of screw breakage. In other words, removal of syndesmotic screw should not be too early.

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