Reply to Letter to the Editor

Does PFNA II Avoid Lateral Cortex Impingement for Unstable Peritrochanteric Fractures?

George A. Macheras MD, PhD, Stefanos D. Koutsostathis MD, PhD,
Spyridon P. Galanakos MD, PhD, Konstantinos Kateros MD, PhD,
Stamatios A. Papadakis MD, PhD

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We read the letter from Tao et al. with great interest. We very much appreciate their comments. In our study [4], we highlighted the fact that surgical technique is the key to achieve ideal nail positioning, ensure stable fixation, and prevent major complications.

We agree with the importance of keeping the instrument insertion line (guide wire, reamer, and the nail) coaxial to the femoral canal line. Following the surgical technique guidance is the safest way to achieve that. In our practice, we always try to use the recommended entry point for the PFNA II according to the manufacturer's suggested surgical technique; the entry point recommended by Synthes is at the tip of the greater trochanter or slightly lateral to it [6]. The decreased mediolateral angle of the PFNA II (5° compared with 6° for the PFNA) and its flattened lateral surface allow for that slightly more lateral entry point. To date, in our department, the PFNA-II has been used in more

than 300 cases of unstable intertrochanteric fractures and no varus reduction of the proximal head-neck fragment or a wedge opening effect between the head-neck fragment and the shaft fragment has occurred.

It is true that there are numerous cases where defining the exact position of the awl at the tip of the greater trochanter is not reliable [1, 2]. We agree that potential problems such as a stiff spine, soft tissue mass about the hip, operative drapes, or laterally oriented operating trajectory of the side-standing surgeon could arise, as Tao et al. noted. We still consider the greater trochanter entry point to be adequate for those cases. There also are cases with extension of the fracture line around the tip of the greater trochanter or with substantial comminution at the suggested entry point. In the latter cases we suggest a deeper awl insertion bypassing the fracture line and introduction of the guide wire under careful fluoroscopy in the AP and lateral views.

Tao et al., in their letter, are in accordance with Streubel et al. [5] who suggested that the trochanteric tip represents the ideal starting point in only the minority of cases and an entry point 3 mm medial to the tip is the most suitable for the majority of the trochanteric nails. Nevertheless, the above suggestions are contrary not only to the manufacturer's surgical technique, but also to the pioneering studies that introduced the PFNA II for Asian patients [3, 7]. We do not argue with the experience of Tao et al., as we do not have a medial entry point experience. However, we do stress the fact that the suggested entry point is at the tip of the greater trochanter and this specific approach was used in our published series.

We thank Tao et al. for adding their experience. Adherence to the suggested surgical techniques should not discourage surgeons from trying to improve on or question some of details.

(Re: Macheras GA, Koutsostathis SD, Galanakos S, Kateros K, Papadakis SA. Does PFNA II avoid lateral cortex impingement for unstable peritrochanteric fractures? *Clin Orthop Relat Res*. 2012;470:3067–3076.)

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G. A. Macheras (✉), S. D. Koutsostathis,
S. P. Galanakos, K. Kateros, S. A. Papadakis
4th Department of Orthopaedics and Traumatology, KAT
Hospital, 2 Nikis Street, 145 61 Athens, Greece
e-mail: gmacheras@gmail.com

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