

## Clinical Outcome Following Treatment of Stable and Unstable Intertrochanteric Fractures with Dynamic Hip Screw

### Dear Editor,

We read with interest the paper by Setiobudi T et al.<sup>1</sup> We wish to congratulate the authors for meticulously conducting a large study on a very relevant topic. However, we wish to draw the attention of the authors to certain points which need to be clarified.

(i) The authors reported a significantly higher malunion rate (55.1%) in the unstable group compared to the stable group (13.1%) ( $P < 0.001$ ). Similarly, they also reported significant excess medialisation (41%) in the unstable group compared to the stable group (11.5%) ( $P < 0.001$ ). In spite of these significant differences, the authors did not find any significant differences in ambulatory status at 1 year. We strongly believe that had the authors used a more sensitive and validated score, like Harris Hip Score (HHS)<sup>2</sup> or Parker and Palmer mobility score,<sup>3</sup> they would have come up with a different conclusion of poorer outcome in unstable intertrochanteric fracture patients. We also feel that hip functional outcome scores when used for Asian patients are useful only if they include squatting and sitting cross legged as they are an integral part of Asian lifestyle.

(ii) There is little biomechanical justification to support the idea of keeping the patient in bed following intertrochanteric fracture fixation.<sup>4</sup> Even simple maneuvers like moving around in bed, use of bed pan in bed, foot and ankle exercises, produce significant loads on the femoral head owing to muscle contractions.<sup>5</sup> It has been shown that unrestricted weight bearing does not increase the complication rates after internal fixation of hip fractures. Moreover, restricted weight bearing can delay the elderly hip fracture patient's functional recovery and return to independent living.<sup>6,7</sup> Therefore, unlike the authors, we believe that irrespective of the type of fracture, quality of reduction or internal fixation, the patients should be mobilised early.

(iii) The current dictum for intertrochanteric fractures is "No Lateral Wall, No Hip Screw".<sup>8</sup> Due to the absence of a lateral osseous buttress, there is uncontrolled collapse with medialisation of the femoral shaft and lateralisation of the proximal femoral fragment if a dynamic hip screw (DHS) is used, which results in deformity, nonunion and screw cut out. Palms et al<sup>9</sup> emphasised that intertrochanteric fractures should be classified according to the integrity of the lateral femoral wall. They advocated classifying

intertrochanteric fractures into 2 groups; AO/OTA 31.A1.1-31A.2.1 stable fractures which can be treated by DHS and AO/OTA 31.A2.2-31A.3.3 unstable or potentially unstable fractures where DHS should not be used. If the authors agree with this philosophy, how do they justify clubbing all the intertrochanteric fractures together to compare the outcome.

There is enough evidence to support that it is time to change the status quo in the management of pertrochanteric hip fractures. Each fracture must be evaluated in totality and a suitable customised treatment for that fracture should be offered to the patient. Merely clubbing all intertrochanteric fractures together and trying to find a straight-jacketed solution for all is not correct. Our goal should be to create a stable fracture reduction and definitive fixation with devices and techniques that not only avoid varus collapse, but neck shortening and lateral wall failure with shaft medialisation.<sup>10</sup>

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