“Four quadrant parallel peripheral screw fixation for displaced femoral neck fractures in elderly patients

Sir,

We read the article titled “Four quadrant parallel peripheral screw fixation for displaced femoral neck fractures in elderly patients” by Satish et al.1 with deep interest. We would like to congratulate the authors for this informative paper. We would like to comment on a few points as follows:

We have been using diamond-shaped configuration2 with four screws, where we insert one screw at the apex (Superior-S), one at the bottom of the neck (Inferior-I), and two in the middle portion of the neck, one anteriorly (MA) and the other one posteriorly (MP) [Figure 1b]. We feel this is a superior construct compared to the rectangular configuration, as the distance between the screws is more, giving better rotational control. Also, this technique allows skimming the neck cortex and calcar femorale, giving additional stability [Figure 1].

1. In the rectangular configuration, putting two screws superiorly and inferiorly will result in the screws being very close to each other [Figure 1a]. Also, it is not possible to skim the calcar with two screws parallel to each other. When this is done, then chances of perforation of neck are higher.

2. Authors have not mentioned about the patients with posterior or medial comminution, as literature mentions that there is increased risk of re-displacement and avascular necrosis if the posterior cortex is comminuted.2 Fourth screw is shown to be useful in fractures with comminution.3

3. We would like to know why this study does not include patients of less than 50 years of age.

Figure 1: Schematic representation of screw construct in neck: (a) four quadrant parallel configuration (b) diamond shaped configuration
Letters to Editor

Sandeep R Biraris, Darius F Soonawalla¹, Dhiraj V Sonawane², Pradip S Nemade³

Departments of Orthopaedics, Mumbai Port Trust Hospital, Soonawalla Orthopaedic Clinic, Grant Medical College and Sir JJ Group of Hospitals, Seth GS Medical College and KEM Hospital Mumbai, Maharashtra, India

Address for correspondence: Dr. Sandeep R Biraris, Department of Orthopaedics, Mumbai Port Trust Hospital Nadkarni Park, Wadala (E), Mumbai - 400037, Maharashtra, India. E-mail: drsandeeprb@gmail.com

REFERENCES

1. Satish BR, Ranganadham AV, Ramalingam K, Tripathy SK. Four quadrant parallel peripheral screw fixation for displaced femoral neck fractures in elderly patients. Indian J Orthop 2013;47:174-81.
2. Huang TW, Hsu WH, Peng KT, Lee CY. Effect of integrity of the posterior cortex in displaced femoral neck fractures on outcome after surgical fixation in young adults. Injury 2011;42:217-22.
3. Ly TV, Swiontkowski MF. Management of femoral neck fractures in young adults. Indian J Orthop 2008;42:3-12.

Access this article online

| Quick Response Code: |
| Website: www.ijoonline.com |
| DOI: 10.4103/0019-5413.125541 |