



Letter to the Editor concerning “The contribution of preoperative balanced halo-pelvic traction to severe rigid spinal deformity correction” by Z. Zhou et al. (Eur Spine J [2023]; doi: 10/1007/s00586-023-07916-w)

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We would like to congratulate Zhou et al. [1] for the publication of their article in this reputed journal. The article is a retrospective study presenting the excellent results obtained with application of balanced halo-pelvic traction (HPT) to adult patients with severe rigid scoliosis in the pre-operative period. The contribution of HPT in final deformity correction after surgery was significant. HPT contribution to main curve correction was 71.6%, to kyphosis correction was 77.5% and to spinal column elongation was 73.6%.

The total deformity correction for major curve achieved after surgery was 57.3% with all posterior approach and multiple-level Ponte osteotomy. This amount of correction is comparable to the one achieved by much more complex and demanding surgical techniques like vertebral column resection (VCR) described by Suk et al. [2]. The simple surgical techniques reduce the incidence and severity of peri-operative complications in the present study.

The authors have highlighted several limitations of the study arising because of the retrospective study design, small sample size, lack of subgroup analysis, and short follow-up period.

The authors have cited a study by Sponseller et al. [3] for halo-gravity traction. This study was conducted on children with mean age of 14 years and has not mentioned the effect of HGT in adult population. We would like to seek more information from the authors with regard to the inclusion and exclusion criteria. The conditions comprising the severe co-morbidities leading to exclusion of the patients

are not mentioned. The exact upper vertebral level used for measuring the thoracic kyphosis varies; some studies take T1 as references, while others choose T4/5 [4]. The authors have not mentioned their preferences. The management of patients having pelvic pin loosening should be described for reader's benefit. The authors have mentioned an average of 3.4 ± 1.7 days bed rest post-operatively. The description of the post-operative rehabilitation protocol followed will be helpful.

References

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