Comment regarding “Is anterior release effective to increase flexibility in idiopathic thoracic scoliosis? Assessment by traction films” (A. Hempfing et al.)

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“Just because a procedure can be done does not mean it should be done” [1].

“The issue is not to know whether the anterior release should be done thoracoscopically or open, the issue is to know whether it should be done at all”

Based on the scientific evidence of the study that the authors report these two main sentences in the text are strong in significance and I am sure our readership has noticed the irony and the subtlety behind them.

The authors have decided to tackle the old concept of anterior release in rigid thoracic spinal deformities. In their analysis of their results on anterior release, they concluded with great honesty that what they did was unnecessary. I would like to commend them for it as most authors report only on how great their surgical result has been! The issue of the need of anterior release is a hot topic in the spinal deformity community the past 15 years have seen new technological developments in performing this anterior release in a thoracoscopic fashion.

The authors conducted the study very well with a small group of patients and evaluated the effects of extensive anterior release with pre and post operative traction films. Although the results of the study were statistically significant in terms of increased flexibility, they were clinically not relevant in terms of magnitude

of increased flexibility gained (only 5° gained in average) as pointed out by the authors themselves. The author's common sense and good clinical observation complement their clinical result than their statistically significant numbers.

Cheung on the contrary recently reported that the thoracoscopic release was efficient as studied on the fulcrum bending tests showing a decrease on the fulcrum bending film curve of 10° after thoracoscopic anterior release [2]. However, Cheung series dealt with minor curves than those in this paper (71° vs. 90° in this series), where the need of anterior release was even less obvious than this current series. Recent papers on the need of anterior release in curves between 70° and 100° have shown that the anterior release was unnecessary with the modern segmental instrumentation [3–5]. In 2000, we published a meta-analysis of anterior release done with thoracoscopic instrumentation and to our surprise the average Cobb angle of the curves being released was only 65° with a maximum of 80° [6]. Today these thoracoscopic releases are being performed at many centers despite the strong evidence shown as in this paper, that it is unnecessary and of little benefit. Interestingly, the authors report their technique of concave thoracoplasty introduced initially by the Germans that is unfortunately not yet published. With such a technique and with the example provided, they can achieve great correction even with little apical segmental instrumentation. This case illustrates the fact that concave costectomies may be more efficient for curve correction than the anterior release as already written by Mann and Nash in 1989 [7].

Therefore, we would like to congratulate the author for showing that old concepts of anterior release of thoracic curves or technologic advances like tho-

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racoscopic releases have had their time and are very rarely indicated nowadays.

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