From Reconstructive Triangle to Reconstructive Quadrangle: Time to Include Tissue Distraction in the Reconstructive Algorithms

Muhammad Saaiq*, Bushra Ashraf

Department of Plastic Surgery and Burns, Pakistan Institute of Medical Sciences, Shahid Zulfiqar Ali Bhutto Medical University, Islamabad, Pakistan

***Corresponding Author:**
Muhammad Saaiq,MD, MBBS, FCPS;
Assistant Professor of Department of Plastic Surgery and Burns,
Pakistan Institute of Medical Sciences,
Shahid Zulfiqar Ali Bhutto Medical University,
Islamabad, Pakistan
Tel: +92-341-5105173
E-mail: muhammadsaaiq5@gmail.com
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DEAR EDITOR

Plastic surgeons are surgical artists and innovators who constantly strive for innovative solutions to the ever challenging management of both congenital and acquired defects and deformities.[1-3] Historically reconstructive ladder was described as the standard algorithmic approach to choose the most appropriate solution in this regard. The emphasis was on adopting a logical approach of moving from simpler to more sophisticated option of undertaking reconstructive procedure for a particular defect.[4] The concepts of micro-leap, reconstructive elevator and inclusion of vacuum assisted closure in the ladder later came in to incorporate useful modifications in the reconstructive ladder.[5,6]

The concept of reconstructive triangle is relatively more recent one and it encompasses tissue expansion, flap transposition and free tissue transfer.[7] Distraction osteogenesis (DO) and the related concepts of soft tissue distraction, distraction lengthening and distraction augmentation[8] are now very much in vogue in the developed centers of plastic surgery and very rightly deserve to be added to the reconstructive triangle, making it a reconstructive quadrangle.

The DO was originally popularized by Ilizarov[9] for long bones, McCarthy[10] later on employed it for craniofacial surgery, and now its use finds its way across a range of other indications in reconstructive surgery. The distraction has the potential to replace many previously established techniques and standardized management protocols. e.g. Bavo Bra in breast reconstruction and distraction augmentation manoplasty (DAM) for congenital hand defects etc.[11]

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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