

Commentary on the article “Alternative technique for open reduction and fixation of displaced pediatric medial epicondyle fractures” by Michael P. Glotzbecker, Benjamin Shore, Travis Matheney, Meryl Gold, Daniel Hedequist. *J Child Orthop* doi:10.1007/s11832-012-0395-1

Nirmal Raj Gopinathan · Manish K. Kothari

Received: 3 May 2012 / Accepted: 14 May 2012 / Published online: 12 June 2012
© EPOS 2012

First of all, we would like to give full credit to the authors for a detailed description of an alternate positioning for the fixation of pediatric medial epicondyle fractures. However, we were not convinced with the authors' point that less tension is required for fracture reduction. To aid reduction of the displaced medial epicondyle fractures, full pronation and flexion at the elbow is required, which is essential whether the patient is supine or prone [1]. In the prone position, the authors claim that the arm naturally seats in a flexed and pronated position, which leads to the fracture reduction without the need to hold tension. However, this natural position is of “midprone”, as rightly depicted by the authors in Fig. 2 in the article. Full pronation will be reached only when the thumb would be facing the ceiling in the same figure (Fig. 2). With regards to the valgus force, numerous studies have studied the relationship of the external rotation of the shoulder to valgus torque at the elbow joint in throwing athletes in the late cocking phase [2, 3]. However, whether this is applicable to a passive relaxed limb is debatable. Neither the authors nor us could find any source to substantiate this claim. Kamath et al. [4] did not find any advantage of the prone position and,

instead, recommended a milking maneuver to reduce the fracture. Lastly, the conclusions of the authors are not in sync with their results. No scoring systems or statistical tests were used to claim that the prone position has significant advantages over the supine position.

References

1. Beaty JH, Kasser JR (eds) (2006) The elbow: physeal fractures, apophyseal injuries of the distal humerus, osteonecrosis of the trochlea, and T-condylar fractures. In: Rockwood and Wilkins' fractures in children, 6th edn. Lippincott Williams & Wilkins, Philadelphia, pp 592–660
2. Rahman RK, Levine WN, Ahmad CS (2008) Elbow medial collateral ligament injuries. *Curr Rev Musculoskelet Med* 1(3–4):197–204
3. Lynch JR, Waitayawinyu T, Hanel DP, Trumble TE (2008) Medial collateral ligament injury in the overhand-throwing athlete. *J Hand Surg Am* 33(3):430–437
4. Kamath AF, Cody SR, Hosalkar HS (2009) Open reduction of medial epicondyle fractures: operative tips for technical ease. *J Child Orthop* 3(4):331–336. doi:10.1007/s11832-009-0185-6

N. R. Gopinathan · M. K. Kothari (✉)
Department of Orthopaedic Surgery, Postgraduate Institute
of Medical Education and Research (PGIMER),
Chandigarh 160012, India
e-mail: manishkkothari@gmail.com