Guest Editorial: Dr Peter M Waters

I am honored to write the editorial for the supracondylar humerus fractures in children symposium in the inaugural International Journal of Paediatric Orthopedics. The manuscripts contained herein cover all the important issues in the care of the child with these potentially devastating injuries. Starting with epidemiology and classification systems, the authors address the importance of common language. This is imperative in order to make appropriate care decisions for each patient and to evaluate results among academic medical centers.

The indications for closed reduction alone, closed reduction and pinning versus open reduction fixation, is critical. So too, is the execution of any and all of these procedures. Supracondylar humerus fractures have the highest risk of complications of any pediatric fracture and proper application of surgical care in a safe, careful way lessens the risk of malunion, loss of motion, function, and need for further surgery. In brief, closed reduction, stable pinning, (usually now with 2-3 lateral entry pins) is the present standard of care for almost all displaced fractures that are not open or do not have neurovascular compromise.

The manuscript on the pink pulseless hand addresses the lack of consensus and the high variation of care in our highest risk patients for Volkman's ischemic contracture, a disastrous result. The patients with a pale pulseless hand are in some respects the most straightforward. Emergent exploration, decompression and if needed, reconstruction of the brachial artery at the site of injury is required. The pink, pulseless patient is harder to assess which patient will do well with observation versus which patient is on the way to compartment syndrome if we do not intervene. Clearly the presence of a median neuropathy increases the risk to the patient. If observation is chosen, it needs to be prolonged and the surgeon needs to be ready to surgically intervene if the patient starts to deteriorate. It can be argued therefore, that safe exploration of the neurovascular bundle during fracture care of the pink pulseless hand is indicated. Advanced technology may help us better discriminate these patients in the future. The pink pulseless hand is not a zero risk situation and requires a high attention to detail to prevent a disaster.

The last portion of this iJPO symposium addresses complications and their treatment. Ideally we will get so skilled in our assessment and care of these children that we lessen the complications of injury and intervention. But problems do occur, and knowing how to properly care for them in a timely fashion (or refer to someone who can) is required.

Finally, the need to continue to learn and get better is addressed. Critically important for all of us and our patients. Our job is to get better generation by generation. I congratulate this team of surgeons on their contribution to the literature, our learning and hopefully better care of our patients.

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