E-Focus on Pediatric Orthopedic Surgery

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We are fortunate this month to have a variety of papers in pediatric orthopedic surgery, and they point out differences in treating children and adults.

In "Patient Survey of Weight Bearing and Physical Activity in In Situ Pinning for Slipped Capital Femoral Epiphysis," Drs. Anand and Chorney's findings clearly indicate that with a proper pinning for *chronic* SCFE, physical activity and weight bearing can be allowed as soon as the patient is comfortable after surgery, and the final result will be the same as if the patient had been restricted to long-term inactivity postoperatively. The issue of postoperative physical activity after pinning for *acute* SCFE was not addressed. Physical activity after pinning for acute SCFE is still not recommended until its effects on the complications of chondrolysis, aseptic necrosis, and nonunion are determined. But a similar study has not been done, probably because an acute slip is so uncommon and a multicenter study would be required.

Drs. Bradley, Tashjian, and Eberson, in "Irreducible Radial Head Dislocation in a Child," have described an unusual case of a dislocated radial head in a 5-year-old that required open reduction. Their discussion of all the impediments to reduction is beautifully thought out. And their emphasis on this dislocation being unrecognized initially is important. To differentiate this irreducible dislocation from a congenital radial head dislocation is essential. The congenital radial head dislocation should not be reduced and trying to reduce it can only cause frustration in the surgeon and a bad elbow in the patient.

Drs. Weinberg, Friedman, Sood, and Crider, in "Tropical Myositis (Pyomyositis) in Children in Temperate Climates: A report of 3 cases on Long Island, New York, and a Review of the Literature" bring to our attention an uncommon (or frequently missed) infectious disease in children: muscle infection, or what is called pyomyositis in the United States and tropical myositis where it is most common, Uganda and New Guinea. The diagnosis is difficult to arrive at unless it is considered in cases of extremity pain and fever in the child. If a magnetic resonance image (MRI) looking at the soft tissues of the extremity is not obtained, the diagnosis will be missed. It makes you wonder how this diagnosis was positively made before the advent of the MRI—by a calculated guess perhaps. It would be best to isolate the organism before treatment, but this occurred in only 1 out of 3 of the authors' cases. An attempt at needling the lesion, possibly under guided x-ray control, should be made. Although the organism most encountered is *Staphylococcus aureus,* in this country this may not be the case and the more resistant organisms should be considered.

Drs. Nanno, Sawaizumi, and Ito, in "Three Cases of Pediatric Monteggia Fracture-Dislocation Associated With Acute Plastic Bowing of the Ulna," also discuss a frequently missed diagnosis—plastic deformation of the ulna with a dislocated radial head. This can only occur in a young child whose bone will bend before it breaks and then maintain its deformed shape. The bend in the ulna forces the radial head to sublux or dislocate and, because the deformed ulna does not go back to its original shape, the radial head is forced to maintain its dislocated position. The authors' recommendation for correction of the deformed ulna before any attempt at reducing the dislocation is a must. The radial head will not remain reduced with an existing deformed ulna. The question to ask: Will the unbent ulna remain unbent after closed reduction, thereby allowing the radial head to remain in place? It is my recommendation that the ulna be not just unbent but also manually or surgically fractured, so that the plastic deformation will not recur. A rigid intramedullary ulna nail after fracture will ensure that a recurrent deformation will not occur, which would allow a dislocation of the radial head to persist.

Drs. Fabregas, Jencikova-Celerin, Kreiger, and Dormans, in "12-Year-Old Boy With Left Knee Pain," involve us in a wonderful tour of the thinking required to make a diagnosis—especially given how complacent one can be with a teen-aged boy with knee pain, very common and usually not serious. If complete studies had not been done and the seriousness of the complaint understood, the lesion would have been missed. The differential diagnosis on the plain films is a good, challenging exercise, especially given a lesion in this location. The discussion of the histology of the lesion and its treatment in a child is captivating.

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