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CORR Insights®: Developmental Dislocation of the Hip Successfully Treated by Preoperative Traction and Medial Open Reduction: A 22-year Mean Followup

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Where Are We Now?

The Ludloff medial approach to the hip for the treatment of pediatric developmental hip

This CORR Insights® is a commentary on the article “Developmental Dislocation of the Hip Successfully Treated by Preoperative Traction and Medial Open Reduction: A 22-year Mean Followup” by Farsetti and colleagues available at: DOI: 10.1007/s11999-015-4264-3.

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dysplasia is popular in some centers with reports of equivalent clinical outcomes and lower avascular necrosis (AVN) rates. Some surgeons may be unfamiliar or lacking confidence in this approach. Therefore, it is only reasonable to believe that surgeons who are unfamiliar with the Ludloff approach will likely prefer traditional anterior access.

The current study by Farsetti and colleagues involves 71 hips treated by medial open reduction with followup to skeletal maturity. The authors are commended for their thoughtful preoperative program (including 4 weeks of preoperative traction), for their long-term followup efforts, and for their thorough assessment of the patients involved. The benefit of preoperative traction remains controversial and warrants well-designed and controlled trials.

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A similar recent Level III paper by Hoellwarth et al. [3] also compared medial and anterior approaches, with 19 in each matched group, and found no differences in AVN rates or need for further surgery. They reported no protective benefit of a preoperative ossific nucleus. The current study by Farsetti and colleagues reports a lower AVN rate in children without ossification of the femoral head at the time of surgery—22 of their 71 patients did not have ossified heads. This remains a topic of debate however, with mixed reports.

Where Do We Need To Go?

The authors of the current study have extended the upper age limit for the use of the medial approach. They presented equivalent results up to 36 months of age, which is important since previously it had only been recommended in children younger than 18 months. Larger series are needed to provide conclusive data regarding long-term outcomes, including the significance of an ossified

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femoral head (or not) and AVN rates. Long-term outcomes should include the rate of conversion to hip arthroplasty or 20 years or more of functional and radiological data. Akilapa's excellent systematic review in 2014 [1] identified only five retrospective observational studies on the medial approach (a total of 174 hips) with a minimum 16 year followup. According to Akilapa, AVN rates appear to increase with longer followup time.

Currently there are no large individual or institutional series available, so data must be pooled, but we must do this with better approaches than are possible using traditional systematic reviews of small patient groups.

How Do We Get There?

Global studies with international collaborations, similar to those being undertaken prospectively by the International Hip Dysplasia Institute (IHDI), are vitally necessary and require vision, strong leadership, and tenured funding—only then will we be able to answer these questions with robust evidence of support and higher levels of confidence. The IHDI model is one worth expanding in order to improve the quality of life for those whose care extends beyond skeletal maturity.

To quote Angliss et al. [2], in a 33-year followup of displaced hips: "It takes a generation to establish the prognosis."

References

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