Letter to the Editor about the article: Intramedullary Flexible Nailing for Diaphyseal Fractures of Forearm Bones in Children

Carta ao editor sobre o artigo: Fixação intramedular flexível para fraturas diafisárias dos ossos do antebraço em crianças

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Dear Editor,

The article by Acharya et al[1] shows important evidence about the surgical treatment of forearm fractures in children, which is accurate according to recent studies presented here. Flexible intramedullary nailing has shown excellent results, especially in consolidation without damaging the growth plate, return to normal activities and few complications. For example, Kapoor et al,[2] in their study with 50 children, demonstrate a consolidation in all fractures in $\sim$ 7 weeks, and in terms of complications, only 2 patients required fasciotomy for postoperative compartment syndrome and 9 patients reported restriction in the pronation by 20 degrees.

However, a systematic review by Patel et al[3] shows a comparison of complications and functional results between flexible intramedullary nailing and fixation plates. The results present no statistically significant differences in terms of consolidation time, complications, degree of angulation, shortening or rotation. The only difference was that flexible intramedullary nailing presents better cosmetic results and shorter duration of surgery. Therefore, the final decision of which method to use would depend on the experience of the surgeon.

On the other hand, the article by Peterlein et al[4] provides important information to apply in all patients who undergo this type of surgery, because it focus on evaluating the long-term results of flexible intramedullary nailing in diaphyseal fractures of forearm in a total of 122 children. Patients were evaluated with the Arm, Shoulder and Hand Disabilities (DASH) scale and the Mayo Wrist score. The DASH score is based on the disabilities mentioned above and the evaluation of performing sports and work. A total of 77% reached a DASH score of 0, which means that these patients did not report complaints after the procedure. In turn, the Mayo Wrist score is a tool that evaluates four variables: pain, grip strength, range of motion and satisfaction. This study reported a Mayo Wrist score of 100 in 82% ($n = 74$) of the patients, that is, the majority did not present any problem.

Based on this, it can be determined that the surgical procedure using flexible intramedullary nailing has no significant differences from other methods, such as fixation plate or conservative treatment. However, most studies determine that this method has certain advantages that favor the recovery and postoperative quality of life of the patient.

References

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