Medial Epicondyle Fractures: Current Practices and Preferences Between SLAOTI Members (Sociedad Latinoamericana de Ortopedia y Traumatología Infantil)

Abstract

Background: Medial epicondyle fractures represent up to 20% of elbow fractures in children and adolescents. There is a growing body of literature to support surgical fixation for displaced fractures. However, controversy regarding imaging modality for displacement measurement and surgical indications remain controversial. The purpose of this survey was to gauge Latin American surgeons' practices and preferences for the evaluation and treatment of medial epicondyle fractures.

Methods: A web-based survey containing 19 questions was distributed to active members of SLAOTI (Sociedad Latinoamericana de Ortopedia y Traumatología Infantil) in November 2018. The survey elicited information regarding surgeon demographics, evaluation methods, the factors involved in the decision to perform surgery, and their experience in cases of symptomatic nonunion. Categorical variables were summarized using frequencies and proportions. Analysis of associations between surgeon demographics and treatment preferences were carried out.

Results: A total of 193 out of 354 completed questionnaires were returned (54% response rate). In total, 74% of the participants (142/193) favored radiographs for the evaluation of the fracture displacement, and 25.4% (49/193) added a computed

tomography scan for a more detailed evaluation. The majority of respondents (48.2%) would consider a 5 mm displacement as the cutoff for surgical treatment, 21.8% 2 mm, 20.7% 10 mm, and 9.3% 15 mm. There were no differences between the experience of the participants, academic versus private setting, or training regarding surgical/nonsurgical management.

Conclusions: There are significant differences in opinions between SLAOTI members as to the optimal management of medial epicondyle fractures. Implications of disagreement in evaluation and treatment support the need for multicenter prospective studies to develop evidence-based guidelines for the management of this fracture.

Level of evidence: Level V-expert opinion. Cross-sectional electronic survey.

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