

Do treatment policies for proximal humerus fractures differ among three Nordic countries and Estonia? A cross-sectional questionnaire-based study

Antti P. LAUNONEN¹, Vesa LEPOLA¹, Minna LAITINEN¹, Ville M. MATTILA¹

¹Department of Orthopaedics, Tampere University Hospital

Background and purpose

Proximal humerus fractures are common fragility injuries. The incidence of these fractures has been estimated to be 82–105 per 105 person-years. Treatment of this fracture, especially in the elderly, is controversial. Our study group published a systematic review of the available literature and concluded that non-operative methods are favored over operative methods in three- and four-part fractures. The aim of this multinational study was to compare treatment policies for proximal humerus fractures among the Nordic countries and Estonia.

Materials and methods

The study was conducted as a questionnaire-based, cross-sectional study using the internet-based program Webropol® (webropol.com). The questionnaire link was sent to the surgeons responsible for treating proximal humerus fractures in major public hospitals in Estonia, Finland, Norway, and Sweden. Altogether, questionnaires were sent to 77 orthopedic surgeons; the distribution among the different countries was proportional to the number of inhabitants in each country.

Results

Of the 77 recipients of the questionnaire, 59 responded; consequently, the response rate was 77%. In both Estonia and Norway and in Finland, 41% and 38%, respectively, preferred surgical treatment with locking plate. In Sweden, the percentage was 28%. Preferences for the prosthesis options were different in Norway, where use of the hemiprosthesis was significantly lower, while use of the reverse prosthesis was significantly higher.

Conclusion

Our survey revealed a remarkable uniformity in the current practice of rehabilitation and nonoperative treatment for proximal humerus fractures in the participant countries.