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Postoperative Management Following Hip Fracture Fixation Worldwide

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Purpose: Variability exists in the management of hip fractures worldwide. This study seeks to determine how experienced orthopaedic surgeons manage patients postoperatively following hip fracture fixation and factors that influence this decision-making process.

Methods: A survey was developed and distributed using a snowball sampling method. A surgeon-leader was identified from every International Orthopaedic Trauma Association (IOTA) member society (n = 28) and Latin American countries active in the Asociación de Cirujanos Traumatólogos de las Américas (ACTUAR) network (n = 12). Each leader identified up to 10 surgeons experienced in treating hip fractures within their country. A unique REDCap survey link was sent to each participant. The survey presented 10 patient scenarios with pre- and postoperative radiographs that described factors such as patient characteristics (gender, age, type of hip fracture (medial or lateral), and number and type of comorbidities), fixation techniques (extra- or intramedullary technique), and quality of reduction (anatomic/satisfactory or non-anatomic/unsatisfactory). Participants responded to associated questions utilizing a 5-point Likert scale that ranked items between 1 “strongly agree” and 5 “strongly disagree”.

Results: The survey was completed by 272 respondents, representing 40 countries across 5 continents. In most scenarios, immediate or early weightbearing was affirmed by respondents (69%), with femoral neck fractures in younger patients treated with cannulated screws as an exception. Intertrochanteric stabilization with sliding hip screw systems was the single scenario in which a majority of respondents (52%) expressed dissatisfaction with the choice of implant. Respondents were predominantly satisfied with the reductions presented in each radiograph; however, most respondents (59%) reported dissatisfaction with several reductions presented following cephalomedullary nailing of intertrochanteric fractures, irrespective of patient age, mechanism of injury, or time to surgery. Except for 1 scenario treated with cephalomedullary nailing, revision osteosynthesis was not supported by a majority of respondents. In general, most

respondents sought the opinion of another orthopaedic surgeon prior to recommending revision osteosynthesis (74%), and most preferred to delay weightbearing rather than revise the fixation (52%).

Conclusion: An understanding of postoperative hip fracture management is fundamental to developing best practices and optimizing patient outcomes. This study provides insights into factors that influence surgeons' post-fixation hip fracture management worldwide and can provide the foundation for how treatment strategies vary in differently-resourced countries.