

FUNCTIONAL EVALUATION OF THE REDUCIBLE LOWER RADIOULNAR JOINT DISRUPTION BETWEEN BELOW ELBOW SLAB AND PERCUTANEUS ULNORADIAL PINNING SURGICAL TREATMENTS IN ADULT PATIENTS WITH GALEAZZI FRACTURE

Pamudji Utomo^{1,2)}, Antoni^{1,2)}

¹⁾Faculty of Medicine, Universitas Sebelas Maret

²⁾Prof. dr. R. Soeharso Orthopedic Hospital, Surakarta

ABSTRACT

Background: Incidence of Galeazzi fracture is relatively rare, but it requires correct management to attain desirable outcome and to prevent functional disorder in the affected patients. Generally, radius shaft plating is considered the best method to produce desirable outcome. However, there are some options to choose for DRUJ dysfunction management. No previous evaluation has been conducted on the functional effect of distal radio-ulnar joint (DRUJ) disruption in patients with Galeazzi fracture at Prof. DR. R. Soeharso Orthopedi Hospital. This study aimed to evaluate the relative effects of below elbow slab and percutaneous ulnoradial pinning surgical treatments on the reducible lower radioulnar joint disruption in adult patients with Galeazzi fracture.

Subjects and Method: This was a cohort study conducted at Prof. Dr. R. Soeharso Orthopedi Hospital, Surakarta, Central Java, from January to December 2012. A total of 39 adult patients with Galeazzi fracture consisting of 23 with percutaneous pinning and 16 with below elbow slab treatment were selected for this study. The dependent variable was reducible lower radio-ulnar joint disruption. The independent variable was type of surgical treatment (below elbow slab versus percutaneous ulnoradial pinning). After 34 week follow-up period, the outcomes of these surgical treatments, i.e. the functional evaluation of reducible lower radio-ulnar joint disruption, were measured by Mikic criteria. The outcome data between the two types of surgical treatment were compared and tested by chi-square test.

Results: The score of functional evaluation of reducible lower radio-ulnar joint disruption in patients who underwent below elbow slab surgical treatment was comparable with counterpart who underwent percutaneous ulnoradial pinning surgical treatment, and it was statistically non significant.

Conclusion: Below elbow slab surgical treatment and percutaneous ulnoradial pinning surgical treatment result in comparable good outcomes in adult patients with Galeazzi fracture.

Keywords: below elbow slab, percutaneous ulnoradial pinning, surgical treatment, Galeazzi fracture.

Correspondence:

Pamudji Utomo. Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Central Java. Email: pamudjiutomo@gmail.com. Mobile: 08122585888.