

INFORMATION ON THE NOVEL CONTRIBUTIONS OF THE DISSERTATION

Title of the dissertation: *Imaging Characteristics and Surgical Outcomes of Closed Scapular Fractures*

Specialty: Surgery

Code: 9720104

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Summary of the Novel Contributions of the Dissertation

This is the first study in Vietnam to simultaneously investigate the imaging characteristics of closed scapular fractures using conventional radiography and three-dimensional computed tomography (3D CT) in a large cohort from two major trauma centers. The study demonstrates the superiority of CT in fracture detection, classification, and quantitative assessment of morphological parameters relevant to surgical decision-making.

The study standardizes the preoperative imaging assessment of scapular fractures using quantitative parameters, including the glenopolar angle (GPA), lateral border offset (LBO), angular deformity, and the percentage of glenoid articular involvement measured on 3D CT, thereby improving the accuracy of surgical indications.

The study identifies the relationship between CT imaging characteristics and surgical indications, providing additional scientific evidence to support treatment selection for patients with closed scapular fractures in clinical practice.

The study confirms the effectiveness of open reduction and internal fixation using locking plates in the treatment of closed scapular fractures, demonstrating satisfactory anatomical reduction, a high fracture union rate, and significant improvements in shoulder function and postoperative quality of life.

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