AB219. 57. Benefits of arthroscopy in acute ankle fracture fixation

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Background: Ankle fractures are one of the most common injuries treated by Orthopaedic Surgeons. A minority of patients with ankle fractures go on to develop persistent pain following anatomical reduction. These sequelae may arise as a result of untreated ligamentous or chondral injuries. Our study aims to correlate acute arthroscopic ankle findings with the Lauge-Hansen fracture pattern classification. We further aim to compare subjective functional outcomes at least 1 year following surgery between patients who have received open reduction internal fixation (ORIF) alone versus ORIF plus arthroscopy.

Methods: This is a retrospective case series of patients who have undergone ankle fracture ORIF +/– arthroscopy (from July 15 to July 17 inclusive). Each patient's presenting ankle radiograph was classified according to the Lauge-Hansen ankle fracture classification with subsequent correlation to intra-operative arthroscopic findings. Functional outcome at a minimum of one year was evaluated with the American Academy of Orthopaedic Surgeons (AAOS) metric.

Results: Twenty-two patients underwent ankle ORIF plus arthroscopy (Group A) with a further 26 patients receiving ORIF alone (Group B). Thirty-three percent of supination external rotation (SER) II injury possessed a concomitant syndesmosis injury orosteochondral lesion (OCL) on arthroscopy. Thirty-three percent of patients with a SER IV injury had an OCL injury. The mean AAOS score (0–100) achieved for Group A was 89.6±7.9. The mean AAOS score (0–100) achieved for Group A was 89.6 (±7.9). The mean AAOS score achieved for Group B was 82.0 (±13.7).

Conclusions: In conclusion, Ankle arthroscopy helps in the diagnosis and treatment of ligamentous injuries and osteochondral injuries not evident on plain film with subsequent excellent short-term outcomes identified.

Keywords: Ankle fracture; arthroscopy; osteochondral injury; syndesmosis; Lauge-Hansen

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