Can Delayed Assessment Better Predict Displaced Midshaft Clavicle Fracture Nonunion?



Fracture union following a displaced midshaft clavicle fracture cannot be predicted based on the clinical factors at the time of injury

It is unclear if clinical recovery assessed 6 weeks after the injury allows for prediction of nonunion

Prospective study of patients with fully displaced midshaft clavicle fracture



Prediction of nonunion

Model based on factors available at time of injury



Comminution



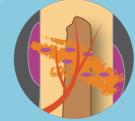
Fracture displacement



Nicholson et al. (2020)

Smoking

Nonunion predictor 6-week model



Injury factors



Functional scores



Radiographic predictors



Predicted by



QuickDASH score > 40



No callus



Fracture movement on examination

...at 6 weeks



3% predicted nonunion risk in patients with no predictors



60% predicted nonunion risk in patients with 2 or more predictors







Model based on factors at time of injury



Higher accuracy for fracture-healing prediction Nonunion predictor 6-week model





Nonunion predictor 6-week model accurately predicts patients likely to have union and require only nonoperative management

Displaced Midshaft Clavicle Fracture Union Can Be Accurately Predicted with a Delayed Assessment at 6 Weeks Following Injury: A Prospective Cohort Study

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