Osteochondral Lesions in the Talus: Predictors of Outcome and Treatment Algorithm

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Introduction:
Osteochondral lesions (OCD) of the talus are a common problem presenting to the foot and ankle surgeon. Multiple operative treatment modalities have been recommended. There are several factors that need to be considered when devising a treatment plan. In this study, we retrospectively review group of patients treated operatively for OCD’s of the talus. A treatment algorithm based on this data is then proposed.

Methods:
Retrospective review of a 224 patients undergoing treatment for talar osteochondral lesions was completed. The efficacy of the initial surgical treatment was evaluated, along with outcomes. Clinical and radiographic reviews were also completed. Factors assessed included age of the patient, size and location of the lesion, cystic versus non-cystic lesion, initial procedure performed, any repeat procedure performed, and any complications. Final outcome and return to activity were also evaluated.

Results:
Improvement was seen in the majority of patients who underwent arthroscopic drilling of their osteochondral lesion. Two parameters showed significant differences in outcome, size of the lesion (greater or less than 1 cm) and cystic versus non-cystic changes. Length of time from injury to diagnosis and treatment was also reviewed, a trend was noted that greater length of time between injury and treatment correlated with lower outcome scores. Mean length of follow-up was 37 months.

Conclusion:
Arthroscopic drilling of osteochondral lesions of the talus is an efficacious treatment option for the correct patient population. However, larger lesions and cystic lesions are often associated with inferior functional outcomes and may require a more extensive initial procedure. Proper patient selection is essential for a favorable outcome. Judicious screening of the selected patient population will increase patient satisfaction and outcome.