

Osteochondral Lesions of the Talus: Evaluation of Risk Factors and their Impact on Postoperative Outcomes

Background

An osteochondral lesion of the talus (OLT), or talar osteochondritis dissecans, is defined as an injury or minor fracture to the talar articular cartilage and its associated subchondral bone. There is a lack of literature describing the impact of patient factors on postoperative outcomes of OLT repairs.

Methods

The American College of Surgeons National Surgical Improvement Program database was retrospectively analyzed to collect data on patients with OLT between 2008 and 2016. Univariate analysis was used to compare patient demographics, hospital and operative variables, potential risk factors, and comorbidities. Logistic regression models were used to adjust the associations of specific risk factors and their respective postoperative outcomes.

Results

There were 491 OLT patients identified. Hypertension requiring medication correlated with readmission ($P=.039$) and extended length of stay ($P=.021$). The American Society of Anesthesiologists (ASA) classification significantly predicted increased rates of extended length of stay, with ASA III being more likely than ASA I (4.8; 95% confidence interval [CI] [1.7–14.2]; $P=.004$) or ASA II (3.0; 95% CI [1.2–7.4]; $P=.016$) to stay in the hospital for longer than a day. OLT patients with ASA III had longer average lengths of stay than ASA I subjects (0.54 ± 0.9 vs 0.14 ± 0.5 days, respectively; $P=.011$).

Conclusion

Hypertension requiring medication and ASA classification positively predicted postoperative complications in OLT patients. Despite being both correlated with extended lengths of stay, only hypertension predicted increased readmission rates.