and posterior superior labral detachment were identified in 35 patients and anterior dislocation and massive rotator cuff tear were diagnosed in 5 patients. Anterior SSN decompression was performed in 5 patients, posterior decompression in 23 and mixed SSN decompression in 12 patients. Post-operatively all patients experienced complete pain relief, particularly at the posterior shoulder. Muscle atrophy was significantly improved at 14 months post-operatively. All athletes gradually regained full ROM. 35 patients returned to pre-injury level and were very satisfied, 3 were satisfied and 2 were partially satisfied. Conclusion: Arthroscopy to address intra-articular pathology along with simultaneous arthroscopic SSN release in the spinoglenoid and/or suprascapular notch can effectively and safely prevent irreversible muscle wasting which occurs in advanced SSN entrapment in volleyball players and has been associated with patients’ high levels of satisfaction.

Category: Shoulder - Other

Does Needle Penetration of the Shoulder Joint Prior to Arthroscopy Increase Infection Risk? The Effect of Preoperative Magnetic Resonance Arthrogram or Corticosteroid Injection

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Summary:
This large database study demonstrates that corticosteroid injection within 4 weeks of shoulder arthroscopy and Magnetic Resonance Arthrogram within 2 weeks of shoulder arthroscopy increases the risk of post-operative infection.

Introduction: Prior literature has associated preoperative corticosteroid shoulder injection (CSI) with infection following shoulder surgery. A recent study found an equally elevated risk of total knee arthroplasty infection with preoperative injection of either CSI or hyaluronic acid. The implication is that violation of a joint prior to surgery, even in the absence of corticosteroid, may pose an elevated risk of infection following orthopaedic surgery. The aim of the present study was to determine whether violation of the shoulder joint for Magnetic Resonance Arthrogram (MRA) poses an elevated risk of infection following shoulder arthroscopy and to compare this risk to that introduced by preoperative CSI. Methods: A national, all-payer database was queried to identify patients undergoing shoulder arthroscopy between January 2015 and October 2020. Patients were stratified into the following groups: (1) no CSI or MRA within 6 months of surgery (n = 5,000), (2) CSI within 2 weeks of surgery (n = 1,055), (3) CSI between 2 and 4 weeks prior to surgery (n = 2,575), (4) MRA within 2 weeks of surgery (n = 414), (5) MRA between 2 and 4 weeks prior to surgery (n = 1,138). Postoperative infection (septic shoulder or surgical site infection) was analyzed at 90-days, 1-year, and 2-years postoperatively. Multivariable logistic regression analysis controlled for differences among groups. Results: MRA within 2 weeks prior to shoulder surgery was associated with an increased risk of infection at 1 year (OR, 2.17; P = 0.007), while MRA 2-4 weeks preceding surgery was not associated with an increased risk of postoperative infection at any time point. By comparison, CSI within 2 weeks prior to surgery was associated with an increased risk of postoperative infection at 90-days (OR, 1.72; P = 0.022), 1-year (OR, 1.65; P = 0.005) and 2-years (OR, 1.63; P = 0.002) following surgery. Similarly, CSI 2-4 weeks prior to surgery was associated with an increased risk of postoperative infection at 90-days (OR, 1.83; P < 0.001), 1-year (OR, 1.62; P < 0.001), and 2-years (OR, 1.79; P < 0.001). Conclusion: Preoperative CSI within 4 weeks of shoulder arthroscopy elevates the risk of postoperative infection. Needle arthrotomy for shoulder MRA elevates the risk of infection in a more limited fashion. Avoidance of MRA within 2 weeks of shoulder arthroscopy may mitigate postoperative infection risk. Additionally, the association between preoperative CSI and postoperative infection may be more attributed to medication profile than to needle arthrotomy.