

ODDS OF BEING RECOMMENDED FOR SURGERY FOLLOWING PHYSICAL THERAPY WITH A SUPERIOR LABRAL LESION

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Background: The effectiveness of conservative management on patients diagnosed with shoulder superior labral lesions is not well established. The likelihood of being recommended for surgical intervention following physical therapy (PT) is not known.

Purpose: This study investigated the odds and relative risk of patients that have been clinically diagnosed with SLAP being recommended to surgery following a 6 weeks bout of standardized physical therapy.

Design and Setting: Prospective cohort

Patients: Fifty nine patients (39±11 years, 45 males) consecutive patients

Methods: All patients underwent an inclusive physical exam by a single orthopedic surgeon and filled out functional (QuickDASH) and pain (numeric pain rating scale) scales. Diagnosis of the Superior labral lesion (SLAP) was made by a positive finding of at least 3 out of 4 clinical signs: history of popping or catching, (+) anterior slide, (+) O'Brien's, (+) modified dynamic labral shear, or MRI imaging. All patients followed a standardized PT emphasizing restoration shoulder strength and mobility for 6 weeks. At 6 weeks follow-up, the patients repeated the same scales plus a global rating of change (GROC) scale. Patients were divided into those who were improved based on patient reported outcomes and secondarily by those who were recommended or not recommended for surgical intervention by treating physician. Two out of the three patient reported outcomes had to exceed minimal detectable changes, based on the literature to represent improvement (I) from PT, less than this was categorized as not improved (NI). The odds and relative risk for being recommended for surgery based on the factor of not improving with physical therapy was calculated with 95% confidence interval.

Results: 24 (41%) were categorized as I and 35 (59%) as NI. 27(45%) patients were recommended for surgery, while 32 (55%) were not recommended. 24/27 patients who did not improve with PT were recommended for surgery, while 11/32 patients who did not improve with PT were not recommended for surgery. The odds of being recommended for surgical intervention are 15.2 (CI₉₅ 3.3-8.19) with a relative risk of 5.5 (CI₉₅ 1.9-21.4) when patients report no improvement in pain or function following a standardized physical therapy intervention. Those patients reporting improvement in perceived function only had a relative risk of .18(CI₉₅ .05-.5) of being recommended for surgery.

Conclusions: Patients diagnosed clinically with SLAP tears can be treated with moderate success (41%) over 6 weeks. Failure to improve perceived function with PT

increases the relative risk by 5 fold for patients to be recommended for surgical intervention. Patients' reporting improvement in pain and function following PT only have a 1/15 chance of being recommended for surgery.

Clinical Relevance: These results suggest that patients with a positive response to PT can reduce their risk of being recommended for surgery. The external validity of this study is limited due to a single surgeon making recommendations; therefore results may vary by surgeon. Longer periods of intervention and follow up are necessary to determine if these effects are lasting.