Earlier Orthopaedic Evaluation is Associated with a Higher Return to Full Duty for Workers' Compensation Patients Treated with Shoulder Arthroscopy

Patrick Allan Massey, Phillip G Fincher, Gabriel G Sampognaro, Milan G Mody, Andrew S Zhang, Shane Barton INTRODUCTION:

Workers' compensation (WC) patients have been noted in numerous studies to have worse outcomes with respect to rotator cuff repair and certain spine surgeries. It has also been shown that earlier return to light duty and job demand level may be associated with return to full duty after shoulder arthroscopy.

The purpose of this study was to evaluate the relationship between earlier orthopaedic evaluation and return to full duty for workers' compensation patients receiving shoulder arthroscopy. A secondary objective was to evaluate if earlier surgery was associated with improved return to full duty.

METHODS:

A retrospective chart review was preformed of all WC patients who received treatment with arthroscopic surgery using CPT codes 29819, 29820, 29821, 29822, 29823, 29824, 29825, 29826, 29827, 29828, 29806, and 29807. The evaluation period was from 2011 to 2018 and all surgeries were done by 2 board certified sports medicine/ American Board of Orthopaedic Surgery certified surgeons. Patients were excluded if they were a poly trauma receiving additional surgeries in the same admission, revision shoulder surgery, and patients treated for a fracture. Patients were divided into two groups: early orthopaedic evaluation (within 100 days of the injury) and late orthopaedic evaluation (more than 100 days after the injury). A secondary evaluation was performed by dividing patients into two groups: early arthroscopic surgery (within 120 days of the injury) and late arthroscopic surgery (more than 120 days after the injury). Data collected included the types of surgery performed, the date of the surgery, the date of the first orthopaedic evaluation, the date of arthroscopic surgery, the date of return to work in some form such as light duty, and the date of return to full duty. Additional data was collected such as the type of job, which was categorized as low, medium, and high demand requirements. Statistics were performed with same software.

RESULTS:

After excluding 5 patients, 59 patients met final inclusion criteria. Being evaluated by an orthopaedic surgeon early, was associated with a higher likelihood of returning to full duty (OR = 3.05, 95% confidence interval = 1.04, 9.00). In total, 69% of patients (24 of 35) were able to return to full duty when evaluated by an orthopaedic surgeon within 100 days, while only 42% were able to return to full duty when evaluated more than 100 days after injury (p=.04).

Earlier arthroscopic shoulder surgery was associated with a higher likelihood of returning to full duty (OR was 5.49, Cl 1.10,27.78). In total, 85% of patients (11 of 13) were able to return to full duty when receiving surgery within 120 days of the injury. When surgery was delayed after 120 days from the injury, only 50% (23 of 46) of patients were able to return to full duty (p=.026).

DISCUSSION AND CONCLUSION:

Early orthopaedic evaluation and early shoulder arthroscopy is associated with a better return to full duty for patients receiving arthroscopic surgery treatment for workers' compensation injuries. Workers' compensation patients with shoulder injuries should receive early evaluation from an orthopaedic surgeon and if surgery is indicated, consideration should be made for earlier arthroscopic intervention.