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**Patients Should Wait at Least Six Weeks, Optimally 12 Weeks, before Driving  
after Total Shoulder Replacement Surgery**

*Significant reduction in simulator collisions at 12 weeks after surgery*

**NEW ORLEANS**—More than 53,000 Americans have total [shoulder joint replacement](#) (SJR) surgery each year, and yet the effects of this surgery on a patient’s ability to safely drive a vehicle, and the appropriate recovery time before patients should return to driving, have yet to be determined. In a new study, [“Driving Performance after Total Shoulder Arthroplasty,”](#) presented today at the 2014 Annual Meeting of the [American Academy of Orthopaedic Surgeons](#) (AAOS), the driving skills of 28 shoulder replacement patients, with a mean age of 65 ±10 years, were tested at four distinct time points before, during and after surgery using a driving simulator.

The first test was conducted before surgery; a second test, 14 days following surgery; and third and fourth tests at six and 12 weeks post-surgery, respectively. The number of total simulator collisions, off-road collisions, on-road collisions, center-line crosses and off-road excursions were recorded at each trial. Pain Visual Analog Scale (VAS) and Shoulder Pain and Disability Index (SPADI) scores also were documented, in addition to annual driving mileage and hours slept the previous night.

In 28 patients, the mean number of collisions decreased from 6.2 during the first test (pre-surgery) to 5.9 at the second test (two weeks after surgery); and from 5.2 during the third test to 4.2 by the fourth and final test. There was a statistically significant difference in the mean number of collisions between the first and fourth test. Also, patients who drove less than 1,800 miles per year incurred a greater number of collisions at the first and fourth tests, compared to patients who drove more than 8,700 miles per year. “At risk driving behavior,” quantified as the number of center-line crosses, decreased from 20.6 during the first test to 14.8 by the fourth test.

According to the study authors, patients showed improved driving performance at 12 weeks, with a significant decrease in the number of collisions in the simulated driving course compared to the tests conducted preoperatively and two weeks after surgery. The study authors recommend that patients wait at least six weeks, and optimally 12 weeks, to resume driving following shoulder replacement surgery.

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