WHAT A DIFFERENCE A DAY MAKES FOR ELDERLY SPINE SURGERY PATIENTS

Early Ambulation After Surgery Improves Outcomes,
Reduces Complications, Gets Patients Home Sooner, and Costs Less

ORLANDO, FL—It is critical that elderly patients who undergo surgery to correct adult degenerative scoliosis get out of bed and get moving during the first 24 postsurgical hours, according to new research reported at the 32nd Annual Meeting of the North American Spine Society (NASS). Prolonged immobilization after surgery can result in functional decline, longer hospital stays, and an increased risk of hospital-associated complications such as pneumonia, deep venous thrombosis, and urinary tract infections.

“I was very surprised at what a difference a 24-hour delay in ambulation made in the patients’ postoperative complications, functional status, and discharge disposition,” said Owoicho Adogwa, MD, MPH, Rush University Medical Center and co-author of the study. “Because more than 30% of patients requiring surgery over the next two decades will be over the age of 65, it is imperative that we develop a deliberate health system-wide approach that ensures early ambulation after surgery in older patients.”

According to Dr. Adogwa, elderly patients have unique physiological and physical challenges that require attention in order to optimize outcomes. What these data show is that health systems need to design processes that facilitate early ambulation after surgery. The benefits of these programs would yield significant improvement in patient outcomes while decreasing complication rates, length of hospital stay, and cost.

The study, “Early Ambulation Decreases Length of Hospital Stay, Peri-Operative Complications and Improves Functional Outcomes in Elderly Patients Undergoing Surgery for Correction of Adult Degenerative Scoliosis,” is a retrospective study of prospectively collected data.

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In the study, data were collected for 125 patients older than 65-years-old who underwent elective spinal surgery for the correction of adult degenerative scoliosis at a major academic medical center. Patient demographics, comorbidities, postoperative complication rates, duration of hospital stay, and 30-day readmission rates were examined. “Days of immobility” were defined as the number of days until a patient moved out of bed beyond a chair after surgery. Patients in the top and bottom quartiles were dichotomized into “early ambulators” and “late ambulators,” respectively. “Early ambulators” (66 patients) were ambulatory within 24 hours of surgery, while “late ambulators” (59 patients) were ambulatory at a minimum of 48 hours following surgery. Complication rates, duration of hospital stay, and 30-day readmission rates were compared between “early ambulators” and “late ambulators.”

The baseline characteristics were similar between both cohorts. Compared to patients with a longer duration of immobility (i.e., “late ambulators”), the prevalence of at least one perioperative complication was significantly lower in the “early ambulators” cohort (30% vs. 54%, p=0.06). The length of in-hospital stay was 34% shorter in the “early ambulator” cohort (5.33 days vs. 8.11 days, p=0.01). Functional independence was superior in the “early ambulator” cohort, with the majority of patients discharged directly home after surgery compared to “late ambulators” (71.2% vs. 22.0%, p=0.01).

The researchers concluded that early ambulation after surgery significantly reduces the incidence of perioperative complications, shortens duration of in-hospital stay, and contributes to improved perioperative functional status in elderly patients undergoing surgery for correction of adult degenerative scoliosis. Even a delay of 24 hours to ambulation is associated with higher complication rates and inferior functional outcomes.

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More than 3,000 spine professionals will meet at the NASS 32nd Annual Meeting in Orlando, October 25-28, 2017 at the Orange County Convention Center to share the latest information, innovative techniques and procedures, best practices and new technologies in the spine field. NASS is a multidisciplinary medical organization dedicated to fostering the highest quality, evidenced-based and ethical spine care by promoting education, research and advocacy. NASS is comprised of more than 8,000 members from several disciplines, including orthopedic surgery, neurosurgery, physical therapy, radiology, anesthesiology, research and physical therapy. For more information, visit www.spine.org, NASS Facebook and NASS Twitter.

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