Complications associated with lumbar stenosis surgery in patients older than 75 years of age

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Wang MY, Green BA, Shah S, Vanni S, Levi AD.
Department of Neurological Surgery, Keck School of Medicine, Los Angeles, California 90033, USA. myw@usc.edu

OBJECT: An aging population will require that surgeons increasingly consider operative intervention in elderly patients. To perform this surgery safely will require an understanding of the factors that predict successful outcomes as well as complications. METHODS: Records of patients older than the age of 75 years who underwent lumbar spinal stenosis surgery were retrospectively reviewed. Preexisting medical illnesses were analyzed using the Charlson Weighted Comorbidity Index. Ambulatory function was rated on a four-point scale. Statistical analysis was performed using a one-tailed t-test with unpaired variance. Eighty-eight patients treated between 1994 and 2001 were identified. Forty-five percent were women and 52 patients underwent spinal fusion. The follow-up period averaged 21 months. Back pain was present preoperatively in 89%; after surgery 43% experienced complete relief and 33% partial improvement. Leg pain was present preoperatively in 98%; after surgery 43% experienced complete relief and 42% partial improvement. Of the 33 patients with preoperative gait disturbances, 61% improved at least one point on the ambulatory scale. Wound complications and systemic complications were demonstrated in 24 and 16 patients, respectively. There were no deaths. Age ($p = 0.322$), number of fused levels ($p = 0.371$), and the number of laminectomy levels ($p = 0.254$) were not predictive of complications. Length of operative time ($p = 0.003$) and the Charlson Weighted Comorbidity Index score ($p = 0.088$) were associated with both systemic and wound complications. CONCLUSIONS: Surgery in patients older than age 75 years can be conducted safely and with similar outcome rates as in younger patients. The Charlson Weighted Comorbidity Index score and operative time were predictive of the risk of complications.

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