Japanese Society for Spine Surgery and Related Research

The Japanese Society for Spine Surgery and Related Research (JSSR) performed a third study on complications in spinal surgery in 2011. The purpose was to present information about surgery and complications in a large amount of elderly patients aged 65 years with lumbar spinal stenosis (LSS) without coexisting spondylolisthesis, spondylolysis, or scoliosis, and to compare patients aged ≥80 years to those aged 65-79 years.

A recordable optical disc for data storage was sent by JSSR in January 2012 to 1105 surgeons certified by the JSSR in order to collect surgical data. Data were returned by the end of May 2012.

Data were accumulated for 8033 patients aged 65 years. The incidence of surgical complications was 10.8%, and did not differ significantly between age groups. The incidence of general complications was 2.7%, and differed significantly between age groups ($p < 0.005$). The highest incidence of surgical complications was for dural tear (DT) (3.6%), followed by deep wound infection (DWI) (1.4%), neurological complications (1.3%), and spinal epidural hematoma (1.3%). Spinal instrumentation was applied in 30.3%. Incidences of surgical complications in instrumented and noninstrumented surgery were 17.3% and 8.8%. In instrumented surgery, incidences of surgical and general complications were higher in the ≥80 year age group than in the 65-79 year age group. Logistic regression analyses showed patients with microendoscopic surgery at increased risk of DT. Patients with diabetes mellitus and instrumented surgery showed increased risks of DWI.

Incidences of surgical complications did not differ significantly between age groups. Attention should be paid to both surgical and general complications, particularly for postoperative mental disease in instrumented surgery for patients≥80 years old [1].

1)
Imajo Y, Taguchi T, Neo M, Otani K, Ogata T, Ozawa H, Miyakoshi N, Murakami H, Iguchi T. Complications of spinal surgery for elderly patients with lumbar spinal stenosis in a super-aging country: An analysis of 8033 patients. J Orthop Sci. 2016 Sep 16. pii: S0949-2658(16)30167-1. doi: 10.1016/j.jos.2016.08.014. [Epub ahead of print] PubMed PMID: 27646205.