Very long-term outcomes of repaired and unrepaired ruptured cerebral aneurysms occurring in people above 70 years of age

Life expectancy is increasing in Western industrial societies while case fatality rates from aneurysmal subarachnoid hemorrhage (aSAH) seem to decrease. Many neurosurgical centers now offer aneurysm repair to aSAH patients aged ≥70 years, albeit it remains contentious at what age aneurysm repair, by clip or by coil, cannot improve the outcome. We studied 123 patients aged ≥70 years at the onset of aSAH, admitted from January 1996 to December 2004. Their median age at aSAH was 74.3 years (IQR: 72-77 years), and 85/123 (70 %) were females. Aneurysm repair was obtained in 96 patients (surgical group). Twenty-six had no repair (non-surgical), 13 of these on grounds of chronological age. The 90-days’ mortality in surgical and non-surgical patients was 21/96 (22%) and 22/26 (86%), respectively. 26 patients (25 of them surgical) had survived by September 30th, 2014, from 10.5 to 18.8 years (median 12.4 years) after SAH. Median 30 months after aSAH (IQR 20-38 months), 73% of responding survivors rated their current health as “good”, “very good” or “excellent”; 70% reported mRS scores of ≤2; 77% had Barthel ADL-scores of ≥90; 77% reported living independently at home; whereas 78% could use public transportation. Up to September 30th, 2014, 15/26 of the survivors had outlived their actuarial life expectancy, the difference from patients considered too old for aneurysm repair was statistically significant (p<0.01, Z=-2.58, Mann-Whitney). Nevertheless, statistical significance may not be the chief issue; the clinical significance of losing another four life-years (median) could be equally important.

Biography

Karl-Fredrik Lindegaard graduated from Oslo University Medical School (medicine) in 1971 and completed his PhD in Oslo in 1987 and a Master degree in health administration in 2002. He became a certified specialist in neurosurgery in 1985. Since 1999 he is professor of medicine (neurosurgery) to the University of Oslo and a senior surgeon at the Neurosurgical Department, Oslo University Hospital. In 2010, he was appointed honorary member of the European Society of Neurosonology and Hemodynamics. His publications include over 60 papers published in reputed international journals.