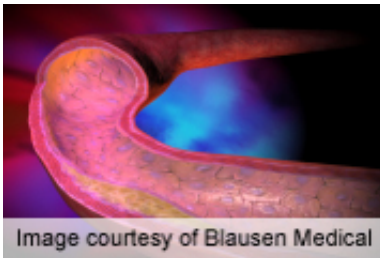


# Risk of rupture increases with size of cerebral aneurysm

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The natural course of unruptured cerebral aneurysms varies according to their size, location, and shape, according to a study published in the June 28 issue of the *New England Journal of Medicine*.

(HealthDay) -- The natural course of unruptured cerebral aneurysms varies according to their size, location, and shape, according to a study published in the June 28 issue of the *New England Journal of Medicine*.

Akio Morita, M.D., Ph.D., from the NTT Medical Center Tokyo, and colleagues analyzed data on 5,720 patients (mean age, 62.5 years; 68 percent women) with newly identified, saccular aneurysms that were 3 mm or more in the largest dimension.

The researchers found that 91 percent of the 6,697 aneurysms were discovered incidentally. Most aneurysms were in the middle cerebral arteries (36 percent) and the internal carotid arteries (34 percent), with a mean size of  $5.7 \pm 3.6$  mm. During follow-up, 111 patients had

documented ruptures (annual rate of rupture, 0.95 percent), with the risk of rupture increasing with the increasing size of the aneurysm. With aneurysms that were 3 to 4 mm in size as the reference, the hazard ratios for rupture with increasing size were as follows: 5 to 6 mm, 1.13 (95 percent confidence interval [CI], 0.58 to 2.22); 7 to 9 mm, 3.35 (95 percent CI, 1.87 to 6.00); 10 to 24 mm, 9.09 (95 percent CI, 5.25 to 15.74); and 25 mm or larger, 76.26 (95 percent CI, 32.76 to 177.54). Also more likely to rupture were aneurysms with an irregular protrusion of the wall of the aneurysm (hazard ratio, 1.63; 95 percent CI, 1.08 to 2.48).

"This study showed that the natural course of unruptured cerebral [aneurysms](#) varies according to the size, location, and shape of the aneurysm," the authors write.

One author disclosed financial ties to the biopharmaceutical and medical equipment industries.

**More information:** [Full Text \(subscription or payment may be required\)](#)

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