**EMBARGOED FOR RELEASE: 11 A.M. (ET) TUESDAY, SEPTEMBER 27, 2016**

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**To place an electronic embedded link to this study in your story** This link will be live at the embargo time: <http://jama.jamanetwork.com/article.aspx?doi=10.1001/jama.2016.13647>

**Earlier Treatment With Surgery to Remove Blood Clot Associated With Less Disability Following Stroke**

In an analysis that included nearly 1,300 patients with large-vessel ischemic stroke, earlier treatment with endovascular thrombectomy (intra-arterial use of a micro-catheter or other device to remove a blood clot) plus medical therapy (use of a clot dissolving agent) compared with medical therapy alone was associated with less disability at 3 months, according to a study appearing in the September 27 issue of *JAMA.*

Five randomized trials have demonstrated the benefit of second-generation endovascular recanalization therapies over medical therapy alone among patients with acute ischemic stroke due to large vessel occlusions (blockage). However, uncertainties remain about the benefit and risk of endovascular intervention when under taken more than 6 hours after symptom onset. Michael D. Hill, M.D., M.Sc., of the University of Calgary, Calgary, Canada, and colleagues conducted a meta-analysis of the data from these 5 randomized trials (1,287 patients enrolled at 89 international sites). Demographic, clinical, and brain imaging data as well as functional and radiologic outcomes were pooled.

The researchers found that compared with medical therapy alone, earlier treatment with endovascular thrombectomy plus medical therapy was associated with lower degrees of disability at 3 months. Benefit was greatest with time from symptom onset to arterial puncture for thrombectomy of less than 2 hours and became nonsignificant after 7.3 hours.

Among 390 patients who achieved substantial reperfusion with endovascular thrombectomy, each 1-hour delay to reperfusion was associated with a less favorable degree of disability and less functional independence, but no change in mortality.

The authors note that within 7.3 hours, “functional outcomes were better the sooner after symptom onset that endovascular reperfusion was achieved, emphasizing the importance of programs to enhance patient awareness, out-of-hospital care, and in-hospital management to shorten symptom onset-to-treatment times.”

“The results of this study reinforce guideline recommendations to pursue endovascular treatment when arterial puncture can be initiated within 6 hours of symptom onset, and provide evidence that potentially supports strengthening of recommendations for treatment from 6 through 7.3 hours after symptom onset.”

(doi:10.1001/jama.2016.13647; the study is available pre-embargo to the media at the For the Media [website](http://media.jamanetwork.com))

**Editor’s Note**: Please see the article for additional information, including other authors, author contributions and affiliations, financial disclosures, funding and support, etc.

**Note**: Available pre-embargo at the For The Media [website](http://media.jamanetwork.com/) is an accompanying editorial, “Endovascular Thrombectomy for Ischemic Stroke,” by Steven Warach, M.D., Ph.D., and S. Claiborne Johnston, M.D., Ph.D., of the University of Texas at Austin.

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