# Migraine Risk Grows After Surgery for Marfan

BY BRUCE JANCIN
*Denver Bureau*

MUNICH — Patients with Marfan syndrome have a sharply increased prevalence of migraine, especially migraine with aura, according to Dutch investigators.

Moreover, Marfan syndrome patients who undergo aortic root surgery experience a double headache of sorts; that is, an independent further increase in the risk of migraine, Dr. Jeroen C. Vis reported at the annual congress of the European Society of Cardiology.

The explanation for the association between aortic root surgery and a high rate of migraine in Marfan syndrome patients is unclear. One possibility is that the aortic graft throws off microemboli, which trigger headache attacks, according to Dr. Vis of Academic Medical Centre, Amsterdam.

He reported on 97 adults with Marfan syndrome who had a mean age of 39 years, and 80 age- and sex-matched controls. All underwent a clinical interview in which diagnosis of migraine was based on International Headache Society criteria.

Migraine was diagnosed in 44% of the Marfan patients, compared with 28% of controls. Thirty-seven percent of Marfan patients had migraine with aura, as did 10% of controls.

The prevalence of migraine among controls was higher than usual. This is most likely due to the influence of familial migraine; 16 of the 80 controls were first-degree relatives of participating Marfan syndrome patients, Dr. Vis said.

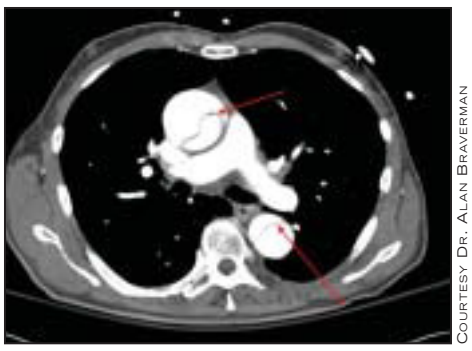
In this study, Marfan syndrome was an independent risk factor for migraine overall, and conferred an adjusted 2.4-fold increased risk, along with a 6.2-fold increased risk for migraine with aura.

Thirty-five percent of the Marfan patients underwent aortic root surgery. A history of the surgery was independently associated with a 3.9-fold increased risk of migraine and a 4.5-fold greater risk of migraine with aura.

**Marfan syndrome patients who undergo aortic root surgery have a double headache; that is, an independent further increase in the risk of migraine.**

The investigators also looked at other cardiovascular features of Marfan syndrome. Neither mitral valve surgery, aortic dilatation, aortic dissection, mitral valve prolapse, nor mitral regurgitation showed an independent association with an increase in migraine. Aortic root surgery was unique in this regard.

Dr. Vis said he and his colleagues plan as a next step to look at headache patterns in patients without Marfan syndrome who have undergone aortic root surgery. The goal will be to determine whether a history of the surgery is a risk factor for migraine and migraine with aura in them, too. ■



COURTESY DR. ALAN BRAVERMAN

**Dissection flaps (arrows) are shown in a Marfan patient before aortic root surgery.**