

## Commentary on the article "Intracranial aneurysms in twins: case report and review of the literature"

*To the Editor*—Leung et al reported on identical twins with intracranial aneurysms, and stated that they reviewed the literature on this topic.<sup>1</sup> Their literature review provides minimal new information, in comparison to the review conducted by ter Laan et al in 2009.<sup>2</sup>

Leung et al's review and subsequent interpretations have similar shortcomings to the previous review and many other published familial aneurysm studies. For example, any prevalence rate of incidental familial aneurysms is more or less irrelevant, in terms of screening recommendations, since familial subarachnoid haemorrhage (SAH), not aneurysms, is the key point to study on. Furthermore, no information about the major modifiable risk factors was given. It is likely that those who smoke intensively, and have familial (juvenile type) hypertension, have a higher risk of forming aneurysms. This does not mean that there is an inherited genetic predisposition to aneurysms, or SAH. Most interestingly, the authors

appear to be unaware of the world's largest twin study published in 2010.<sup>3</sup> This study clearly showed that there is a minimal role for genetic factors in the aetiology of SAH, whereas environmental factors play the most significant role.<sup>3</sup> It is written in the summary that "On the basis of current evidence, screening of familial aneurysms may be warranted at least for first-degree family members with 2 SAHs in the family and to a monozygotic sibling of a MZ twin with a positive history of SAH."<sup>3</sup> Therefore, any recommendations or speculations on the basis of anecdotal case reports on the subject should not perhaps be followed.

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### References

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## Authors' reply

*To the Editor*—I agree that the literature review of the abovementioned paper<sup>1</sup> does not differ much from previous work. Nevertheless, it actually signifies the rarity of this disease entity. It also suggests that reporting of such cases is crucial for better understanding of this condition.

Concerning the twin study published in 2010,<sup>2</sup> I do find the argument and reasoning sound and valid. Genetic factors play a minimal role in the aetiology of SAH and further anecdotal case reports concerning SAH should not be sought. But the development of intracranial aneurysm is a different focus of

interest, especially in twins. The clinical dilemma we put forward is whether we should intervene for asymptomatic unruptured aneurysm when the other twin develops a SAH. Whether aneurysm would eventually progress to SAH, the risk factor concerned and the management strategy in twins is a big topic for further discussion.

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