Letter to the Editor

Unruptured Intracranial Aneurysms—Pathogenesis and Individualized Management

by Prof. Dr. med. Nima Etminan. Prof. Dr. med. Arnd Dörfler, and Prof. Dr. med. Helmuth Steinmetz in issue 14/2020

Consider Various Therapy Options

Etminan et al. (1) offer a very instructive and clear presentation of the risk factors for aneurysm rupture in their review of unruptured intracranial aneurysms, and they clearly describe the often complex counseling of patients about the various treatment options (1). For aneurysms of the middle cerebral artery (MCA), they recommend microsurgical clipping as a primary therapy because of the lower risk of recurrence (1). It is certainly correct that MCA aneurysms are treated by clipping more often than average at many centers, due to their relatively easier surgical access as compared to other locations. Nevertheless, the current data and meta-analyses, as well as our own experience (2, 3), show that unruptured MCA aneurysms can be treated using modern endovascular techniques with comparable morbidity and mortality. Therefore, the therapeutic approach for this location should also be discussed in an interdisciplinary and open-ended manner in accordance with the individual expertise of the treating specialist in the respective center, taking into account current literature. From our point of view, a general "clip-first policy" based on location is no longer appropriate for MCA aneurysms.

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References

Etminan N, Dörfler A, Steinmetz H: Unruptured intracranial aneurysms—pathogenesis and individualized management. Dtsch Arztebl Int 2020; 117: 235–42.

- Hagen F, Maurer CJ, Berlis A: Endovascular treatment of unruptured MCA bifurcation aneurysms regardless of aneurysm morphology: short- and long-term follow-up. AJNR Am J Neuroradiol 2019; 40: 503–9.
- Toccaceli G, Diana F, Cagnazzo F, et al.: Microsurgical clipping compared with new and most advanced endovascular techniques in the treatment of unruptured middle cerebral artery aneurysms: a meta-analysis in the modern era. World Neurosurg 2020; 137: 451–64.e1.

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Conflict of interest statement

Prof. Berlis has received consultant honoraria from Microvention, Stryker, and Medtronic.

Prof. Weber has received consultant honoraria, reimbursement of travel expenses and meeting participation fees, and speaking honoraria from Medtronic, Stryker, Phenox, Penumbra, and Microvention.

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Dr. Maurer declares that no conflict of interests exists

In Reply:

With respect to middle cerebral artery aneurysms, we stated that once a decision has been made for preventive therapy, there is not an *a priori* preference here (in contrast to other locations) for endovascular treatment, but rather that factors such as the anatomical condition in this location or the lower risk of recurrence associated with clipping must be weighed against the advantages of coiling (1). This is supported by a recently published metanalysis (2). A reference to the importance of the individual expertise of the treating specialist was made in the corresponding paragraph of our article.

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References

 Etminan N, Dörfler A, Steinmetz H: Unruptured intracranial aneurysms—pathogenesis and individualized management. Dtsch Arztebl Int 2020; 117: 235–42. Alreshidi M, Cote DJ, Dasenbrock HH, et al.: Coiling versus microsurgical clipping in the treatment of unruptured middle cerebral artery aneurysms: a meta-analysis. Neurosurgery 2018; 83: 879

–89.

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Erratum

In the article entitled "Suicidality in Childhood and Adolescence" by Merle Becker and Christoph U Correll in the 10 April issue of *Deutsches Ärzteblatt* (issue 15), a result of the study reported by Miché et al. (reference 23 in the article) was presented in a partially incorrect manner. It should have read: "A German study of adolescents and young adults showed that among those with previous post-traumatic stress disorder (PTSD), 93.4% of subsequent suicide attempts could have been prevented if the PTSD had been prevented—assuming causality between PTSD and later suicide attempts (23)."