

Editorial

Clipping and Coiling with the Same Hand

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Due to the rarity of distal anterior cerebral artery (DACA) aneurysms, treating these aneurysms successfully through open microneurosurgical procedure or endovascular intervention by an individual requires a very long time to gain enough experience. Hence, most of the published articles comprise small case series or case reports without comparison between two modalities of treatment.¹ At this stage, it is difficult to comment on the superiority of one treatment modality over the other for DACA aneurysms. The more peripheral location of DACA aneurysms and their smaller size preclude endovascular occlusion as the treatment of choice. Recently, the use of hydrophilic microcatheters and shapable micro guidewires have made access to DACA aneurysms possible.² However, passing a microcatheter through A1 is often still difficult due to anatomical variations associated with DACA aneurysms like hypoplastic A1, fenestration/duplication of A1, perforation of the optic nerve by A1, bihemispheric A2, and triplication of A2.³ Getting adequate support while passing microcatheters and guidewires to distal ACA is the key⁴ for newer intermediated catheters. Microsurgical techniques have the upper hand in bihemispheric blood supply, where the surgeon can visualize intraoperatively, safeguarding the concerned vessel.^{5,6} A recent meta-analysis by Petr et al showed the superiority of microsurgical clipping over endovascular occlusion for DACA aneurysms.¹ We must appreciate the authors of the present work in adding more case series to the existing cohorts of microsurgical clipped versus endovascular occluded DACA aneurysms.⁷ A smaller series from India has been published by Hussain and colleagues comprising 11 cases of ruptured DACA aneurysms that underwent endovascular treatment. The study had no comparison group of microsurgical clipping arm and showed high intraprocedural events during endovascular occlusion of DACA aneurysms.⁸ One of the most extensive case series of DACA aneurysms treated

surgically, comprising 132 cases from India, showed very good results.⁹ In the absence of more evidence, a dual-trained neurosurgeon can give better justice in the decision-making for the treatment of DACA aneurysms.

Conflict of Interest

None declared.

References

- 1 Petr O, Coufalová L, Bradáč O, Rehwald R, Glodny B, Beneš V Safety and efficacy of surgical and endovascular treatment for distal anterior cerebral artery aneurysms: a systematic review and meta-analysis. *World Neurosurg* 2017;100:557–566
- 2 Kalani MYS, Wanebo JE, Martirosyan NL, Nakaji P, Zabramski JM, Spetzler RF. A raised bar for aneurysm surgery in the endovascular era. *J Neurosurg* 2017;126:1731–1739
- 3 Morris P. *Practical Neuroangiography: Includes Access to Full Text and Image Bank Online*. 3rd ed. Philadelphia: Wolters Kluwer Health, Lippincott Williams & Wilkins; 2013
- 4 Nguyen TN, Raymond J, Roy D, et al. Endovascular treatment of pericallosal aneurysms. *J Neurosurg* 2007;107(05):973–976
- 5 Perlmutter D, Rhoton AL Jr. Microsurgical anatomy of the distal anterior cerebral artery. *J Neurosurg* 1978;49(02):204–228
- 6 Nathal E, Yasui N, Sampei T, Suzuki A. Intraoperative anatomical studies in patients with aneurysms of the anterior communicating artery complex. *J Neurosurg* 1992;76(04):629–634
- 7 Furtado SV, Jayakumar D, Perikal P, Mohan D. Contemporary management of distal anterior cerebral artery aneurysm: a dual trained neurosurgeon's perspective. *J Neurosci Rural Pract* 2021;12(4):711–717
- 8 Husain S, Andhitara Y, Jena SP, Padilla J, Aritonang S, Letsoin I. Endovascular management of ruptured distal anterior cerebral artery (DACA) aneurysms: a retrospective review study. *World Neurosurg* 2017;107:588–596
- 9 Shukla D, Bhat DI, Srinivas D, et al. Microsurgical treatment of distal anterior cerebral artery aneurysms: a 25 year institutional experience. *Neurol India* 2016;64(06):1204–1209

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