

Posterior communicating artery aneurysm outcome

Complete recovery of [oculomotor nerve palsy](#) with [Posterior communicating artery aneurysm](#) is more commonly associated with surgical clipping than with endovascular coiling. Also, the degree of pre-operative [oculomotor nerve palsy](#) and the treatment modality are significant factors that affect the complete recovery of [oculomotor nerve palsy](#) ¹⁾.

One in five patients with a [posterior communicating artery aneurysm](#) present with [oculomotor nerve palsy](#) with or without [subarachnoid hemorrhage](#). Factors associated with a higher likelihood of recovery include time to treatment, partial third nerve deficit, and presence of subarachnoid hemorrhage. Both surgical and endovascular therapy offer a reasonable chance of recovery. Based on level 2 evidence, clipping appears to offer a higher chance of oculomotor nerve palsy recovery; however, coiling will remain as an option particularly in elderly patients or patients with significant comorbidity ²⁾.

Clipping posterior communicating artery aneurysms was associated with a higher probability of complete recovery from [oculomotor nerve palsy](#) (ONP) than coiling. Degree of preoperative ONP also affected recovery. If patients can tolerate surgery, it should be considered the treatment of choice ³⁾.

In the series of Feely et al. partial palsy at the time of surgery was followed by an early and rapid recovery. Nine of 10 patients who had complete palsy and had surgery within 8 days of the onset made a full recovery. ⁴⁾

Recurrence

[Posterior communicating artery aneurysm recurrence](#)

¹⁾

Khan SA, Agrawal A, Hailey CE, Smith TP, Gokhale S, Alexander MJ, Britz GW, Zomorodi AR, McDonagh DL, James ML. Effect of surgical clipping versus endovascular coiling on recovery from oculomotor nerve palsy in patients with posterior communicating artery aneurysms: A retrospective comparative study and meta-analysis. *Asian J Neurosurg*. 2013 Jul;8(3):117-24. doi: 10.4103/1793-5482.121671. PubMed PMID: 24403953; PubMed Central PMCID: PMC3877497.

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Golshani K, Ferrell A, Zomorodi A, Smith TP, Britz GW. A review of the management of posterior communicating artery aneurysms in the modern era. *Surg Neurol Int*. 2010 Dec 22;1:88. doi: 10.4103/2152-7806.74147. PubMed PMID: 21206898; PubMed Central PMCID: PMC3011114.

³⁾

Chen PR, Amin-Hanjani S, Albuquerque FC, McDougall C, Zabramski JM, Spetzler RF. Outcome of oculomotor nerve palsy from posterior communicating artery aneurysms: comparison of clipping and coiling. *Neurosurgery*. 2006 Jun;58(6):1040-6; discussion 1040-6. PubMed PMID: 16723882.

⁴⁾

Feely M, Kapoor S. Third nerve palsy due to posterior communicating artery aneurysm: the importance of early surgery. *J Neurol Neurosurg Psychiatry*. 1987 Aug;50(8):1051-2. PubMed PMID:

3655811; PubMed Central PMCID: PMC1032236.

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