A study evaluated the outcomes of coiling versus clipping of unruptured anterior communicating artery aneurysms (A-com) treated by a hybrid vascular neurosurgeon to suggest the best protocol of management for these conditions.

They retrospectively reviewed the records of 70 patients with an unruptured A-com aneurysm treated with coiling or clipping performed by a hybrid vascular neurosurgeon between March 2012 and December 2019. The patients were dichotomized, into the coil group or clip group. Treatment-related complications, clinical and radiological results were evaluated.

Of the 70 patients identified, 37 underwent coiling and 33 clipping. Procedure-related symptomatic complications occurred in 2 patients (5.4%) in the coil group and 3 patients (9.1%) in the clip group. Poor clinical outcome (modified Rankin Scale [mRS] of 3 to 6) at 6 months of follow-up was seen in only one patient (2.7%) for the coil group, and none for the clip group. The one poor outcome was the result of intra-procedural rupture during coiling. Follow-up conventional angiography data (mean duration, 15.0 months) revealed that the major recanalization rate is 5.6% for the coil group and 10.0% for the clip group.

Management of A-com aneurysms requires more collaboration between microsurgical clipping and endovascular therapy. Evaluation of patient and aneurysm characteristics by considering the advantages and disadvantages of both techniques could provide an optimal treatment modality. A hybrid vascular neurosurgeon is expected to be a proper solution for the management of these conditions.  