

Review of: "Hemorrhagic stroke treated by transcranial neuroendoscopic approach"

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Hemorrhagic stroke (HS) is a devastating disease which was usually treated under microscopy. Authors of this study was focus on a new approach for hemorrhagic stroke - transcranial neuroendoscopic approach. The authors made a new classification on hemorrhagic stroke first according to the etiology, they classified HS patients into the primary HS (PHS) and secondary HS (SHS) groups, with the former comprising primary ICH cases and the latter comprising secondary ICH and SAH cases. Then HS were surgically treated through a transcranial neuroendoscopic approach either by full neuroendoscopy (FNE) or by neuroendoscopy combined with microsurgery (ECM). And the outcomes were assessed according to the Glasgow Coma Scale (GCS) at discharge, and the rate of good plus excellent results was recorded as the GE rate to assess the treatment effect.

Through the treatment of neuroendoscopy, they have achieved good results: all 203 patients underwent surgery successfully, with 165 patients who underwent FNE and 38 patients who underwent ECM. No patients died within 3 days after surgery, and the surgery-related mortality rate was 0%. A total of 133 patients showed an excellent result and 16 showed a good result, for a total GE rate of 73%.

Through the analysis of the results, they came to the conclusion:the transcranial neuroendoscopic approach is feasible and safe for both PHS and SHS and is very effective for hematoma evacuation. However, some aneurysms and most arteriovenous malformations and arteriovenous fistulas require ECM. This article is an exploration on the treatment of HS. There is no comparative analysis with microscope. It only discusses the feasibility, advantages and disadvantages of neuroendoscopy in the treatment of HS. Even so, the new treatment of HS is still worthy of affirmation and encouragement. In particular, the number of cases treated in this article is sufficient, covering cerebral hemorrhage, intracranial aneurysms, vascular malformations, arteriovenous fistula and so on, which is a useful exploration and supplement to the traditional treatment. The next step will be more convincing if they can increase the comparison with traditional microsurgery.