Endoscopic aspiration for basal ganglia hemorrhage evacuation

For Fu et al. endoscopic surgery was safer and more effective than the other 2 surgical methods, with greater improvement in neurologic outcomes and no change in mortality.

Minimally invasive neuroendoscopic management has the advantages of direct vision, efficient hematoma surgical evacuation, and relatively good results. Endoscopic surgery may be a more promising approach for the moderate basal ganglia hemorrhage treatment [1].

Endoscopic evacuation significantly decreased the 6-month mortality in patients with hemorrhage ≥40 ml and GCS ≤ 8 [2].

Endoscopic aspiration can decrease the 6-month mortality of spontaneous basal ganglia hemorrhage, especially in patients with a hematoma volume ≥40 mL [3].

Endoscopic surgery with the help of a tubular retractor was effective and safe. It allowed for a good visualization of the hematoma and the surrounding brain, and helped in proper hemostasis. The hematoma may also be removed with the help of the microscope and the tubular retractor, in case any difficulty during the endoscopic technique is encountered [4].

1)
Fu C, Wang N, Chen B, Wang P, Chen H, Liu W, Liu L. Surgical Management of Moderate Basal Ganglia Intracerebral Hemorrhage: Comparison of Safety and Efficacy of Endoscopic Surgery, Minimally Invasive Puncture and Drainage, and Craniotomy. World Neurosurg. 2019 Feb;122:e995-e1001. doi: 10.1016/j.wneu.2018.10.192. Epub 2018 Nov 4. PMID: 30404051.
2)
Liu H, Wu X, Tan Z, Guo H, Bai H, Wang B, Cui W, Zheng L, Sun F, Zhang X, Fan R, Wang P, Jing W, Gao J, Guo W, Qu Y. Long-Term Effect of Endoscopic Evacuation for Large Basal Ganglia Hemorrhage With GCS Scores ≦ 8. Front Neurol. 2020 Aug 14;11:848. doi: 10.3389/fneur.2020.00848. PMID: 32922354; PMCID: PMC7457040.
3)
Guo W, Liu H, Tan Z, Zhang X, Gao J, Zhang L, Guo H, Bai H, Cui W, Liu X, Wu X, Luo J, Qu Y. Comparison of endoscopic evacuation, stereotactic aspiration, and craniotomy for treatment of basal ganglia hemorrhage. J Neurointerv Surg. 2019 Jul 12. pii: neurintsurg-2019-014962. doi: 10.1136/neurintsurg-2019-014962. [Epub ahead of print] PubMed PMID: 31300535.
4)
Ratre S, Yadav N, Parihar VS, Dubey A, Yadav YR. Endoscopic surgery of spontaneous basal ganglionic hemorrhage. Neurol India. 2018 Nov-Dec;66(6):1694-1703. doi: 10.4103/0028-3886.246288. PubMed PMID: 30504567.