

The complication rate of [Neuroendoscopy](#) is not negligible even in experienced hands. The majority are minor complications that do not affect the final [outcome](#), but sporadically major events may occur, leading to significant problems in surgical management and, occasionally, to permanent disabilities. Careful selection of patients on preoperative imaging studies and intensive training of surgeons is mandatory to improve results ¹⁾.

Neuroendoscopy is a minimally invasive technique whose related complications have been focused on cortical function and surface vessels injury. However, white matter disruption has been insufficiently acknowledged.

A method using tractography and oriented models of surgical instruments allows assessing white matter transgression, both qualitatively and quantitatively, for a deep brain trajectory. Thus, this method permits to optimize safety and avoid transgression of eloquent tracts during surgical planning. Nevertheless more studies are needed ²⁾.

Traumatic subdural hygroma after endoscopy

[Traumatic subdural hygroma after endoscopy](#)

¹⁾

Cinalli G, Spennato P, Ruggiero C, Aliberti F, Trischitta V, Buonocore MC, Cianciulli E, Maggi G. Complications following endoscopic intracranial procedures in children. Childs Nerv Syst. 2007 Jun;23(6):633-44. Epub 2007 Apr 20. PubMed PMID: 17447074.

²⁾

García S, Rincon-Torroella J, Benet A, Oleaga L, González Sánchez JJ. Assessment of White Matter Transgression During Neuroendoscopic Procedures using DTI Fiber Tracking. World Neurosurg. 2016 Nov 30. pii: S1878-8750(16)31260-8. doi: 10.1016/j.wneu.2016.11.112. [Epub ahead of print] PubMed PMID: 27915065.

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