

## REVIEW

ROLE OF CEREBRAL IMAGING IN THE MINIMALLY  
INVASIVE TECHNIQUES FOR INTRACEREBRAL  
HEMATOMA EVACUATION

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**Abstract. Introduction.** Intracerebral hemorrhages represent the second most frequent, but the most severe form of stroke, with 1 in 3 patients passing away shortly after its debut. Considering these data, it is necessary to identify efficient ways to evacuate intracerebral hematomas and improve their morbidity and mortality, with brain imaging being truly helpful to neurosurgeons. **Objectives.** To identify the role of imaging for the evacuation of spontaneous intracerebral hematomas. **Methods.** We performed an extensive literature review, examining the latest published studies and therapeutic protocols. We performed a comprehensive evaluation of the latest imaging and surgical techniques for the diagnosis and treatment of intracerebral hemorrhages. **Results.** These studies suggest that surgical intervention and evacuation of the hematoma, based on imaging and clinic, can have an immediate life-saving effect on certain groups of patients, but it does not significantly influence the long-term prognosis and death rate. **Conclusions.** Modern imaging techniques help neurosurgeons preoperatively, as they can more accurately estimate the benefits of the surgical intervention, intraoperatively through neuronavigation, and postoperatively, modulating therapeutic management by identifying specific imagistic signs. Surgical interventions, both invasive and especially minimally invasive, have a proven positive effect on the evolution of patients, reducing acute mortality, but with uncertain results regarding improving long-term prognosis.

**Keywords:** spontaneous, intracerebral hemorrhage, stroke, hematoma, neurosurgery, radiology.

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