

Stereotactic needle aspiration for brain abscess

see [Needle aspiration for brain abscess](#).

With the use of modern stereotactic neurosurgical techniques, almost any brain abscess that measures at least 1 cm in diameter is amenable to stereotactic aspiration, regardless of location.

It is the mainstay for [Brain abscess surgery](#). Especially well suited for multiple or deep lesions may also used with thin walled or immature lesions.

The introduction of CT-guided needle aspiration may provide this important information. Frequent scanning, at least once per week, is essential in monitoring treatment response. Although surgical intervention remains an essential treatment, selected patients may respond to antibiotics alone ¹⁾.

Repeated aspiration should be considered in patients in whom the initial aspiration proves ineffective or partially effective. Complete resolution may require repeated stereotactic aspirations and continued antibiotic therapy ²⁾.

Microbiological diagnosis can be obtained in all cases of BA. This is achieved by the conjunction of rapid needle aspiration and the optimization of microbiological diagnosis resulting from fast management of the surgical specimen, good anaerobic culture conditions, and the use of blood culture bottles and molecular biology techniques when appropriate. Moreover, it is of clinical and therapeutic interest when BAs are suspected in immunocompetent patients ³⁾.

Diagnostic aspiration should be aimed at achieving maximal drainage of the abscess. Continuous drainage, made possible by placing a catheter into the abscess cavity, has been advocated as a means of decreasing reoperation rates, but this technique is not routinely recommended ⁴⁾.

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Last update: **2024/06/07 02:55**

