

Multiple brain metastases

At the time of diagnosis, more than 50% of patients present with multiple lesions.

Multiple [brain metastases](#) are increasing in incidence due to factors such as overall increasing cancer incidence, better diagnostic tools, and because improved cancer treatment causes longer survival and therefore increasing possibility of patients living long enough to develop brain metastases. Treatment options today offer limited effectiveness in patients with multiple brain metastases on the long run and neurological symptoms can be the leading problem for many of these patients. One of several new experimental treatments emerging is electrochemotherapy (ECT), so far showing promising preclinical data and the first patient has been treated in an ongoing clinical trial ¹⁾.

Treatment

[Multiple Brain Metastases Treatment.](#)

Case series

The goal of a retrospective investigation was to evaluate the outcome of patients who undergo surgery for multiple cerebral metastases and to determine prognostic factors.

Schackert et al. included 127 patients with multiple brain metastases in the study. The median number of metastases was three. All patients were operated on for at least one lesion. The indications for surgery were: large tumours ≥ 2.7 cm(3), metastases of unknown primaries at the time of diagnosis, and space-occupying cerebellar lesions. If possible, adjuvant WBRT was applied.

The median MST of the whole group was 6.5 months; for patients with complete resection, 10.6 months. According to the [RPA](#) classification the MST ranged between 19.4 (class I), 7.8 (class II), and 3.4 months (class III) ($p < 0.001$). KPS > 70 had a significant influence on MST (9.1 months vs. 3.4 months, $p < 0.001$), the number of lesions: 2-4 vs. > 4 ($p = 0.046$), and postoperative WBRT in multivariate analysis ($p = 0.026$). Age was not a significant factor. The 2-year survival rate was 15% and the 3-year survival rate 10%.

Favourable factors for prolonged survival were complete resection of all lesions, no more than four metastases, RPA-class I and adjuvant WBRT. The resection of large lesions, while leaving smaller residual ones, did not result in increased survival ²⁾.

¹⁾

Linnert M, Iversen HK, Gehl J. Multiple brain metastases - current management and perspectives for treatment with electrochemotherapy. *Radiol Oncol.* 2012 Dec;46(4):271-8. doi: 10.2478/v10019-012-0042-y. Epub 2012 Nov 9. PubMed PMID: 23412694; PubMed Central PMCID: PMC3572894.

²⁾

Schackert G, Lindner C, Petschke S, Leimert M, Kirsch M. Retrospective study of 127 surgically treated patients with multiple brain metastases: indication, prognostic factors, and outcome. *Acta Neurochir (Wien).* 2013 Mar;155(3):379-87. doi: 10.1007/s00701-012-1606-8. Epub 2013 Jan 13. PubMed PMID: 23314988.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=multiple_brain_metastases

Last update: **2025/04/29 20:23**

