En bloc resection

see En bloc vertebrectomy.

The resection of a tumor virtually without dissection surgery.

Piecemeal resection of a intracranial metastases carries a higher risk of leptomeningeal seeding (LMS) than en bloc resection or stereotactic radiosurgery (SRS) [1) 2)].

The local recurrence (LR) risk of a single brain metastasis is influenced by biological factors (such as tumor volume) and treatments (such as the resection method). Early administration of postoperative whole-brain radiation therapy (WBRT) may be particularly warranted when such negative tumor-related prognostic factors are noted or when treatment-related ones such as piecemeal resection (PMR) are unavoidable [3)]

Outcome

Surgical technique has an impact on the outcome since piecemeal resection rather than en bloc resection and leaving infiltrative zone behind around resection cavity may have a negative influence on local control. Best local control of brain metastasis can be accomplished with optimal surgical resection involving current armamentarium of preoperative structural and functional imaging, intraoperative neuromonitoring, and advanced microneurosurgical techniques; followed by adjunct therapies like stereotactic radiosurgery, whole brain radiotherapy, or intracavitary therapies [4)].

Ahn et al. suggest that piecemeal resection using the CUSA should be limited because of the risk of postsurgical leptomeningeal seeding (LMS), especially when the tumor is in contact with the CSF pathway [5)].

Patel et al. results indicate that postoperative complication rates are not increased by en bloc resection, including for lesions in eloquent brain regions or for large tumors. This gives credence to the idea that en bloc resection of brain metastases, when feasible, is at least as safe as piecemeal resection [6)].

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