Brain Metastases Epidemiology

Brain metastases (BMs) are the most common intracranial tumors in adults.

In the last two decades, an enormous improvement in controlling extra-cranial disease has been achieved, positively affecting the overall survival of patients. However, this has led to an increased number of patients who live long enough to develop Brain Metastases ¹⁾

Brain metastases are the most common intracranial tumors in adults, accounting for significantly more than one-half of brain tumors. In patients with systemic malignancies, brain metastases occur in 10 to 30 percent of adults and 6 to 10 percent of children No reliable estimates are available on the incidence in cancer patients. This information is valuable for planning patient care and developing measures that may prevent or decrease the likelihood of metastatic brain disease 2) 3) 4).

Brain metastases are the most common cause of malignant brain tumours in adults. Of the nearly 1.5 million patients in the USA who received a primary diagnosis of cancer in 2007, about 70 000 of these primary diagnoses are estimated to eventually relapse in the brain $^{5)}$ 6).

Between 20% and 40% of all patients with metastatic cancer will have brain metastases at autopsy 7.

Rates of CNS involvement in metastatic cancer are believed to be increasing, possibly owing to better control of systemic disease with novel chemotherapies or improved metastases detection.

However, controversies exist regarding demographic and clinical profile of brain metastases.

Analysis from the Kentucky and Alberta cancer registries similarly demonstrated the aggressive nature of lung cancer and its propensity for BM at initial presentation. Besides widespread organ involvement, no synchronous organ site predicted BM in lung cancer. BM is a common and important clinical outcome, and use of registry data is becoming more available ⁸⁾.

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