Brain Metastases in Patients with No Known Primary Tumor

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Introduction
Brain metastases are a common complication in cancer patients and an important cause of morbidity and mortality. In adults, the primary tumors most often responsible for brain metastases are lung cancer (50%) and breast cancer (15% to 20%). Patients with unknown primary cancers account for approximately 10 to 15% of patients with brain metastases (Cancer 1981 Jul 15;48(2):384-94). Stereotactic radiosurgery with or without whole brain radiation therapy has been used quite often in an attempt to achieve better tumor control. In this study, the researchers reported the outcome of patients with brain metastases who were treated with stereotactic radiosurgery, and who had no identifiable primary lesion.

Method
A total of 421 patients with brain metastases over an 11-year period who were treated with stereotactic radiosurgery were reviewed. Fifteen patients were who had unknown primary cancers eligible for analysis.

Results
- The median survival after radiosurgery was 15 months.
- Three patients were still alive between 21 and 48 months after radiosurgery.
- Three patients died because of progression of brain metastasis.
- Significant factors influencing survival were active systemic disease and brain stem location.

Discussion
In this study, in patients with brain metastases without a detectable primary site, stereotactic radiosurgery provided good local tumor control. Better local control was associated with longer than expected survival. Control of active systemic disease in patients with brain metastases remains a major challenge for oncologists.