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Stereotactic Radiotherapy (SRT) for Intracranial Metastasis: Moroccan Experience

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Abstract
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Abstract

Objective: Stereotaxic radiation therapy is a new treatment technique, which requires specialized equipment and an experienced team. The aim of the study is to analyze and share our experience as low income country in brain stereotaxic radiation therapy.

Methods: This is a retrospective study, about 30 cases of patients treated with stereotaxic brain irradiation for malignant tumors, either a single "radiosurgery" session, or in several sessions. without exceeding five fractions with doses greater than or equal to 5 Gy per fraction.

Results: The median age was 45 years [18-66 years], with a predominance of men (sex ratio: 1.4), the median number of fractions of 3 [1-5], with a dose median per fraction of 7 Gy [5-12 Gy]. These were mainly brain metastases (75%). The median tumor size was 25 mm [6-38 mm]; the localization was noted to be predominant in the right cerebral hemisphere. The indication for radiotherapy was either a primary irradiation in the case of oligometastatic cancer (84%), or a re-irradiation in five cases for breast metastases (two cases), a medulloblastoma (one case) and a glioblastoma (two cases).

Conclusion: Stereotaxic radiotherapy is a therapeutic option for malignant brain tumors, especially in cases of oligometastatic disease. Our study certainly has a short follow-up with a small number of patients, however it is an innovative experiment in our country and which has already demonstrated its effectiveness and scientific validity on an international scale.