Reviewer's report

Title: Clinical practice guideline on the optimal radiotherapeutic management of brain metastases.

Version: 1 Date: 6 January 2005

Reviewer: John Flickinger

Reviewer's report:

General
Overall this was relatively well written concise and clear.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
The author lists recommendations for management of 1-3 brain mets with radiotherapy under a heading about radiotherapy of multiple brain mets. "Radiotherapy of Brain Metastases" would be a less confusing subtitle there on page 3.
It would be helpful to mention Auchter's retrospective comparison of managing resectable brain mets with surgery XRT vs radiosurgery vs XRT alone.
On page 12 the authors' simplistic statement that radiosurgery did not improve survival in Level on studies, other than in the subset of solitary mets in one of the studies (which happened to be the best of the bunch)may be misunderstood by the casual reader. The authors should state that this refers to using radiosurgery as initial management, since salvage radiosurgery could not have been precluded in these studies. Given the effectiveness of salvage radiosurgery, it is surprising that the RTOG found a survival improvement in any subset.

Discretionary Revisions (which the author can choose to ignore)
The author's probably should mention the finding in several retrospective series like Loeffler's or Flickinger's that tumor control with recurrent brain metastases (that progressed after prior WBXRT) is poorer than that seen with intitial radiosurgery. Recurrent tumor may be more radioresistant. In addition, WBXRT combined with radiosurgery may be better than radiosurgery alone. WBXRT improved control compared to radiosurgery alone in Maryland's paper: [Shehata MK, Young B, Reid B, et al. Stereotactic radiosurgery of 468 brain metastases < or =2 cm: implications for SRS dose and whole brain radiation therapy. Int J Radiat Oncol Biol Phys. 2004 May 1;59(1):87-93.] These may be reasons why initial radiosurgery improved survival in solitary met patients in the RTOG trial.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable
Statistical review: No

Declaration of competing interests:
No conflicts