**ABSTRACT**

**CONCLUSION**

Different management strategies for multiple brain metastases (>4 brain metastases) are currently being evaluated in prospective clinical trials to minimize the likelihood of cognitive decline following WBRT.

**METHODS:**

A search of selected studies relevant to management of brain metastases was performed in PubMed as well as in various published meeting abstracts. This data was collated and analyzed in context of contemporary management and future clinical trial plans. This data is presented in tabular form and discussed extensively in the text.

**RESULTS:**

The published data demonstrate continued evolution of clinical trials and management strategies designed to minimize and/or prevent cognitive decline following radiation therapy management of brain metastases. Hippocampal avoidance whole-brain radiation therapy (HA-WBRT) and radiosurgery treatments for multiple brain metastases are discussed along with preliminary results of RTOG 0614, a trial of memantine therapy to prevent cognitive decline following WBRT. Trial results appear to support the use of memantine for prevention of cognitive decline.