

Journal Watch

The use and Toxicity of Steroids in the Management of Patients with Brain Metastases.

Reference Sturdza A, Millar B-A, Bana N, Laperriere N, Pond G, Wong RKS, Bezjak A.

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Abstract: GOALS OF WORK: To document the use of steroids and frequency of their side effects in patients with brain metastases. PATIENTS AND METHODS: A survey of oncologists who manage patients with brain metastases was conducted to document steroid prescribing practice in our institution. In addition, a retrospective chart review of 88 patients treated with whole brain radiotherapy (WBRT), identified through the Palliative Radiation Oncology Program database, was conducted for a 6-month period to document steroid doses prescribed, tapering schedules, and steroid side effects. RESULTS: Ninety percent of physicians responded to the survey. Forty-five percent routinely used dexamethasone 4 mg qid (16 mg/day). The others determined the dose of steroid according to the presence or absence of neurological symptoms. Sixty percent tapered the patient's steroids over the 4 weeks following completion of WBRT. The most common side effects noted by physicians were: increased appetite or weight gain (46%), insomnia (24%), gastrointestinal symptoms (20%). In the retrospective study, dexamethasone 4 mg qid was prescribed to 52% patients prior and during WBRT. Sixty-six percent of patients were instructed to taper dexamethasone after WBRT, but details were not provided. The most frequently documented steroid-related side effects were: increased appetite (32%), proximal muscle weakness (28%), and insomnia (21%). CONCLUSIONS: There is considerable variation in the prescribing practices even within a single institution, with many patients receiving high dose of steroids for considerable periods of time and developing related side effects. Strategies to reduce the amount and length of steroids may result in improved therapeutic ratio; we are currently accruing onto such a trial.

Strengths: Combined prospective survey and retrospective review. The prospective survey of oncologists, and several palliative medicine physicians is detailed, capturing multiple aspects of corticosteroid use administered pre, during, and post radiotherapy for patients with brain metastases. Equally, there is a detailed discussion of the survey results incorporating previous studies on steroid use for brain metastases. Reasonable sample size of physicians surveyed.

Weaknesses: The chart review is retrospective with the common limitations imposed by the retrospective nature including incomplete charts. The authors identify the absence of a fixed protocol for the dose or tapering of dexamethasone.

Relevance to Palliative Care: There appears to be varying practices in the use of dexamethasone for patients with brain metastases, particularly in relation to dosing during radiotherapy, duration of continuation post radiotherapy, and frequency and nature of side effects from steroid use. This paper provides some further insight into these issues. It was reassuring, and of interest, that the authors comment that they are involved in a prospective trial of an established dose of dexamethasone that will be prescribed to patients according to presence or absence of neurological symptoms prior to the onset of radiotherapy.