

## ***PALLIATIVE CARE TIPS***

**Issue # 29** (Collect them all)

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### **Palliative Care Tips – Radiotherapy in Palliative Care: Brain Metastases**

#### **The Problem**

- Brain metastases outnumber primary brain tumors 10:1, and occur in 20-40% of patients with cancer
- Frequency by primary tumor:
  - Lung > breast > melanoma > colon > other known primary > unknown primary
- >70% of patients have multiple metastases by the time they are diagnosed

#### **Diagnosis**

- >2/3 have neurological symptoms:
  - Headache > focal weakness > seizures > altered higher mental functions
- First investigation: CT scan. IV contrast is always helpful unless there is a medical contraindication to its use.

#### **Management**

- Steroids are used to decrease cerebral edema, which assists in relief of headache and nausea, and can potentially improve other neurologic signs and symptoms
  - Decadron: The usual dose is 4 mg PO QID, followed by a tapering dose after RT completion. There is no role for indefinite steroids.
  - Consider a proton pump inhibitor (ie Pantoloc) for gastric protection
- There is no role for prophylactic anti-epileptic medications. These should be started only if the patient has a seizure.
- Referral to Radiation Oncology
  - The most common treatment is whole brain radiotherapy (WBRT)
    - Involves a face mask for immobilization
    - Usually given in 5 to 10 fractions
    - Potential acute side effects of WBRT: fatigue, hair loss (hair does grow back in most patients), scalp irritation, and less commonly headache, nausea, vomiting or exacerbation of presenting neurologic signs and symptoms. This is usually prevented by decadron.
    - Long terms side effects are less common, given the poor prognosis of the majority of these patients.
  - There may be a role in select cases for surgery (if a solitary metastasis) or stereotactic radiosurgery (three lesions or fewer, all <3.5cm in size); this can be assessed for by Radiation Oncology.
  - In some patients with a very poor performance status, the optimal treatment may be best supportive care (ie steroids, but no RT).

#### **Outcome**

- WBRT improves survival compared to steroids alone.
- Surgical resection and stereotactic radiosurgery may further improve survival for properly selected patients.

#### **How to access further assessment for radiotherapy?**

- Contact the Regional Palliative Care Program Consultant (496-1300)

- If the patient has seen a radiation oncologist, that physician can be contacted directly. Otherwise, the radiation oncologist on-call for the primary tumor site will see the patient (432-8771).

### **References**

1. Patchell R. The management of brain metastases. *Cancer Treat Rev* 2003; 29:533.
2. See Palliative Care Tips 26(1) and 26(2) for other references on palliative radiation.
3. For further information regarding the role of prophylactic anticonvulsants, see the Clinical Practice Guideline, "Chronic Seizure: Guideline for Pharmacological Management in Palliative Patients".  
<http://www.palliative.org/PC/ClinicalInfo/Clinical%20Practice%20Guidelines/PDF%20files/Chronic%20Seizure%20Pharmacological%20Management%20in%20Palliative%20Care.pdf>