Medications Commonly Used

Steroid Medications

- Decadron/dexamethasone is the steroid usually used
- Steroids reduce symptoms due to swelling inside the brain caused by the brain tumor or treatment
- It is important to make changes in the steroids gradually and to not stop these medications suddenly
- It may be necessary to adjust the dose of steroid medication up or down during or following radiation
- Common side effects of steroids include:
 - o Increased appetite and weight gain
 - Facial swelling
- Possible side effects of steroids include
 - o Weakening of muscles
 - Elevated blood sugar or worsening of existing diabetes
 - Thrush (fungal infection) of the mouth
 - o Mood change or agitation
 - o Insomnia/trouble sleeping

Antacid stomach medications

- Usually Zantac/ranitidine or Losec/omeprazole used
- Help reduce stomach upset from steroid medication
- The dose of the antacid medication usually doesn't change even if the steroid dose is changed

Anticonvulsant/antiseizure medication

- Examples are Dilantin/phenytoin; Valproate/valproic acid or Tegretol/ Carbamazepine; Phenobarbitol/Phenobarb
- Help control seizures (partial or generalized)
- It is important to take these drugs regularly and have the level of the drug in the body checked with blood tests regularly to make sure the dose of medication is correct

Questions about your medication can be raised with your pharmacist, nurse or physician

Information for Patients Receiving Radiation Treatments for Brain Tumors

Primary nurse Radiation Oncologist: Neurosurgeon: Neuro-oncologist: Type of brain tumor Part of brain to be treated Number of treatments planned: **BRAIN FUNCTIONS** Parietal lobe intelligence **Frontal lobe** reasoning movement
decision telling right from intelligence making left reasoning
judgment · language behavior
initiative sensation memory inhibition reading personality . mood planning **Occipital lobe** vision **Temporal lobe** speech behavior Cerebellum memory balance hearing coordination vision fine muscle control · emotions Brain stem

Pituitary gland

hormones

· growth

fertility

breathing

heartbeat

swallowing

blood pressure

Radiation Treatments for Brain Tumors

- Radiation treatments are usually given following surgery to help delay or prevent further tumor growth
- Radiation treatments are typically given as a series of daily radiation treatments, Monday-Friday, over 10-30 treatments (2-6 weeks)
- The treatments are delivered on specialized radiation machines (Linear accelerators) at the cancer centre by Radiation Therapists under the direction of the Radiation Oncologist (Physician)
- Nurses specialized in radiation treatments will also be involved in your care
- Radiation treatment planning appointments occur before treatment begins

Radiation Treatment Planning

- A custom plastic mask is made that is worn to position your head for treatment each day
- Marks are put on the mask to allow the Radiation Therapists to set up the treatments accurately
- A CT scan is performed and based on the CT scan a radiation treatment plan is designed to treat the tumor while avoiding as much normal brain tissue as possible
- Radiation physicists and dosimetrists work with your Radiation Oncoloigst to develop a radiation treatment plan specific to your needs
- The risk of potential side effects of radiation are kept as low as possible by attention to the dose of radiation given and amount of brain being treated



Linear accelerator



Common early side effects from radiation

- hair loss and mild sunburn of the scalp
- tiredness
- change in taste or mild dry mouth
- irritation of the ear canal or fluid in the middle ear

Less common early side effects from radiation

- headaches
- worsening of seizures or other symptoms from the tumor
- nausea or vomiting

In the 6 months following completion of radiation

- energy level and other side effects will generally improve over 4-6 weeks after radiation
- temporary return of tiredness and/or worsening of symptoms may occur 2-3 months after radiation
- hair re-growth occurs slowly (4-6 months) and may not be complete

Potential long term effects 6 months or more after radiation

- Effects on thinking or memory (severe impairment rare)
- Changes in vision (rare, less than 1 in100 patients)
- Stroke-like brain injury (rare. Less than1/100)
- Effects on pituitary (hormone) function (can be common)
- Radiation related second brain tumor (very rare, less than 1 in 1000 patients)

Follow-up after radiation

- Follow-up after radiation includes scans (CT or MRI scan) and visits with your radiation oncologist or neuro-oncologist
- Checkups usually occur at 4-6 weeks after radiation and then every 3-6 months after
- Purpose of follow-up is to check on the control of the tumor and manage any side effects of the radiation treatment and symptoms of the tumor
- If chemotherapy is to be given in addition to radiation, it may be started with radiotherapy or 4-6 weeks following completion of radiotherapy depending on the type of tumor and treatment.

Plastic mask for treatment