Possible Side Effects of Radiotherapy for Brain Tumor Treatment

<table>
<thead>
<tr>
<th>Organ System</th>
<th>Acute Complications (During Treatment and up to Three Months after Treatment Ends)</th>
<th>Chronic Complications (Months to Years after Treatment)</th>
</tr>
</thead>
</table>
| General      | • Acute fatigue  
• Weight loss  
• Seizures                                    | • Chronic fatigue  
• Pituitary gland damage (may require hormone replacement therapy)  
• Seizures                           |
| Skin & Scalp | • Irritation  
• Redness  
• Hair loss (partial or complete)  
• Possible peeling and/or blistering | • Permanent changes to the skin appearance (thickening, darkening, color change)  
• Altered or incomplete hair regrowth (may affect part or all of the scalp) |
| Brain        | • Headaches  
• Swelling of the brain which can cause altered sensation, decreased strength, altered nerve function, and/or increased risk for seizures | • Headaches  
• Damage to normal brain causing alteration in ability to reason or remember, loss of strength or sensation in parts of body controlled by affected brain area |
| Eyes         | • Eye irritation  
• Eye dryness                                  | • Cataract formation  
• Eye dryness  
• Loss of vision from eye or nerve damage (rare) |
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<td>Ears</td>
<td>• Inflammation of ear canal with irritation, discharge, dizziness or sense of “fullness”&lt;br&gt;• Fluid buildup behind the ear drum&lt;br&gt;• Decreased or muffled hearing</td>
<td>• Decreased or loss of hearing (<em>due to damage of hearing organs or from persistent fluid behind the ear drum</em>)</td>
</tr>
<tr>
<td>Nose &amp; Mouth</td>
<td>• Altered sense of taste or smell&lt;br&gt;• Mouth sores or dryness*</td>
<td>• Altered sense of taste or smell&lt;br&gt;• Decreased saliva production (rare)</td>
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<td>Gastrointestinal (Stomach)</td>
<td>• Nausea and/or vomiting&lt;br&gt;• Discomfort with swallowing*</td>
<td>• Nausea and/or vomiting&lt;br&gt;• Difficulty with swallowing*</td>
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<tr>
<td>Radiation</td>
<td>• Contra-indicated for scleroderma or active systemic lupus</td>
<td>• Radiation-induced cancer of the skin, lining of the brain (meninges), or brain tissue (rare)</td>
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*only applies if your treatment area includes the lower or back part of the brain*