

MEDICAL NECESSITY CHECKLIST FOR MANDIBULAR OSTEORADIONECROSIS PROPHYLAXIS WITH HBO

A. Related oncology history:

Diagnosis date: _____ Tumor type & location: _____ Radiation dose: _____ cGy

Radiation therapy (RT) delivery type:

- | | |
|--|-------------------------------|
| <input type="checkbox"/> Two dimensional | <input type="checkbox"/> IMRT |
| <input type="checkbox"/> Three dimensional/conformal | <input type="checkbox"/> IGRT |

RT completion date: _____

B. Patient referred by:

Oral maxillofacial surgeon: Dr. _____

Dental surgeon: Dr. _____

Other : Dr. _____ Specialty: _____

C. Planned operative procedure:

- | | |
|---|--|
| <input type="checkbox"/> Single tooth extraction | <input type="checkbox"/> Dental implant(s) |
| <input type="checkbox"/> Multiple tooth extractions | <input type="checkbox"/> Smoothing sharp bony irregularities |
| <input type="checkbox"/> Other; type: _____ | |

D. Check any existing radiation-induced oral pathology:

- | | |
|--|---|
| <input type="checkbox"/> Pain (<i>see note 1</i>) | <input type="checkbox"/> Hypogeusia-partial taste loss (<i>see note 1</i>) |
| <input type="checkbox"/> Mucositis (<i>see note 1</i>) | <input type="checkbox"/> Trismus-reduced jaw opening (<i>see note 1</i>) |
| <input type="checkbox"/> Xerostomia-dry mouth (<i>see note 1</i>) | <input type="checkbox"/> Ulceration (<i>see note 2</i>) |
| <input type="checkbox"/> Dysphagia-difficulty swallowing (<i>see note 1</i>) | <input type="checkbox"/> Exposed alveolar bone/mandible (<i>see note 3</i>) |

ADDITIONAL GUIDANCE

1. These complications do not represent a medically necessary indication for HBO treatment of ORN.
2. This presentation is a manifestation of soft tissue radiation necrosis, so can form the treating diagnosis. This qualifies the Medicare patient for HBO, while HBO for prophylaxis, *per se*, does not. The intended procedure noted in "C" occurs upon tx # 20, so communicate that anticipated date in order for surgery to be scheduled. Subsequent treatments support post-op surgical wounding, while continuing the STRN, per protocol. Where uncertainty exists regarding STRN therapeutic endpoint, institute a one or two week "medical holiday" after some 30 txs, then reevaluate need for any additional HBO.
3. This represents mandibular osteoradionecrosis, and the patient treated as such. It will likewise qualify the Medicare patient for reimbursement. The intended operative procedure noted in "C" above occurs upon reaching 20 treatments, so communicate that anticipated date in order for surgery to be scheduled.
4. If two-dimensional (2-D) RT was used, a relationship should exist/overlap between the RT portal and the surgery site for HBO to be medically necessary. In the decades since establishing HBO research, conformal, intensity modulated (IMRT) and image guided (IGRT) RT have become standards of care. Many have since questioned the need/value for continued HBO in this new era. A recent study specifically addressed this question and failed to demonstrate HBO benefit.* The impact of this new research is under review by evidence-based proponents, clinicians and purchasers of health care. Until such time that practice guidelines become available, each case involving modern RT should be assessed on its merits/potential risks. Examples include RT dose, years since RT, number of extractions planned, current oral health and pre-existing pathologies noted in "D".

Shaw RJ, et al. HOPON (Hyperbaric Oxygen for the Prevention of Osteoradionecrosis): A Randomized Controlled Trial of Hyperbaric Oxygen to Prevent Osteoradionecrosis of the Irradiated Mandible after Dentoalveolar Surgery. *Int J Radiation Oncology Biology Physics*. 2019;104(3):530-539