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| What is the preferred terminology and definition for osteonecrosis of the jaw (maxilla and mandible) associated with pharmacologic therapies in oncology patients? | It is recommended that the term “medication-related osteonecrosis of the jaw” (MRONJ) be used when referring to bone necrosis associated with pharmacologic therapies.      | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Weak                                                                 |
|                                                                                 | Clinicians should confirm the presence of all three of the following criteria in order to establish a diagnosis of MRONJ: 1) Current or previous treatment with a bone-modifying agent (BMA) or angiogenic inhibitor; 2) Exposed bone or bone that can be probed through an intraoral or extra-oral fistula in the maxillofacial region and that has persisted for longer than 8 weeks; and 3) No history of radiation therapy to the jaws or metastatic disease to the jaws. | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Weak                                                                 |
| What steps should be taken to reduce the risk of MRONJ?                           | For cancer patients scheduled to receive a BMA in a non-urgent setting, oral care assessment (including a comprehensive dental, periodontal, and oral radiographic exam when feasible to do so) should be undertaken prior to initiating therapy. Based on the assessment, a dental care plan should be developed and implemented. The care plan should be coordinated between the dentist and the oncologist to ensure that medically necessary dental procedures are undertaken prior to initiation of the BMA. Follow-up by the dentist should then be performed on a routine schedule (e.g., every six months) once therapy with a BMA has commenced. | Type: Evidence based  
Evidence quality: Low/Intermediate  
Strength of recommendation: Moderate                                                                 |
|                                                                                 | Members of the multidisciplinary team should address modifiable risk factors for MRONJ with the patient as early as possible. These risk factors include poor oral health, invasive dental procedures, ill-fitting dentures, uncontrolled diabetes mellitus, and tobacco use. | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Moderate                                                                 |
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| Elective dentoalveolar surgical procedures (e.g. non-medically necessary extractions, alveoloplasties, and implants) should not be performed during active therapy with a BMA at an oncologic dose. Exceptions may be considered when a dental specialist with expertise in prevention and treatment of MRONJ has reviewed the benefits and risks of the proposed invasive procedure with the patient and the oncology team. | Type: Evidence based  
Evidence quality: Intermediate  
Strength of recommendation: Moderate |
| If dentoalveolar surgery is performed, patients should be evaluated by the dental specialist on a systematic and frequently scheduled basis (e.g., every 6-8 weeks), until full mucosal coverage of the surgical site has occurred. Communication with the oncologist regarding status of healing is encouraged particularly when considering future use of BMA. | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Moderate |
| For patients with cancer who are receiving a BMA at an oncologic dose, there is insufficient evidence to support or refute the need for discontinuation of the BMA prior to dentoalveolar surgery. Administration of the BMA may be deferred at the discretion of the treating physician, in conjunction with discussion with the patient and the oral health provider. | Type: Informal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Weak |
| How should MRONJ be staged? | A well-established staging system should be used to quantify the severity and extent of MRONJ and to guide management decisions. Options include the 2014 AAOMS staging system, the Common Terminology Criteria for Adverse Events (CTCAE) 5.0 and the 2017 International Task Force on ONJ staging system for MRONJ. The same system should be used throughout the patient’s MRONJ course of care. Diagnostic imaging may be used as an adjunct to these staging systems. | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Weak |
| Optimally, staging should be performed by a clinician experienced with the management of MRONJ. | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Weak |
| How should MRONJ be managed? | Conservative measures comprise the initial approach to treatment of MRONJ. Conservative measures may include antimicrobial mouth rinses, antibiotics if clinically indicated, effective oral hygiene, and conservative surgical interventions (e.g., removal of a superficial bone spicule). | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Moderate |
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| Should BMAs be temporarily discontinued after a diagnosis of MRONJ has been established? | For patients diagnosed with MRONJ while being treated with BMAs, there is insufficient evidence to support or refute the discontinuation of the BMAs. Administration of the BMA may be deferred at the discretion of the treating physician, in conjunction with discussion with the patient and the oral health provider. | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Weak |
| What Outcome Measures Should Be Utilized in Clinical Practice to Describe the Response of the MRONJ Lesion to Treatment? | During the course of MRONJ treatment, the dentist/dental specialist should communicate with the medical oncologist the objective and subjective status of the lesion — resolved, improving, stable or progressive. The clinical course of MRONJ may impact local and/or systemic treatment decisions with respect to cessation or recommencement of BMAs. | Type: Formal consensus  
Evidence quality: Insufficient  
Strength of recommendation: Weak |