

cumulative survival and success rates. Moreover, greater peri-implant bone loss was noted in patients treated with the delayed loading protocol.

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## Literature Abstract

### Clinical recommendations regarding use of cone beam computed tomography in orthodontics. Position statement by the American Academy of Oral and Maxillofacial Radiology

This positional paper summarized the benefits and risks of maxillofacial cone beam computed tomography (CBCT) use in orthodontic diagnosis, treatment, and outcomes and provides clinical guidance to dental practitioners. CBCT in orthodontics has the advantage of generating numerous linear and curved planar projections derived from a single CBCT scan and the possibility of image reconstruction. Guidelines for the suggested use of CBCT in orthodontic practice consider four factors. (1) The appropriate image according to clinical condition, ie, the clinical condition must justify the exposure of the patient to radiation, and no existence of a better choice of imaging method with a lower or nil radiation exposure. The CBCT protocol must restrict the field of view (FOV) and minimize exposure (mA and kVp). Additional two-dimensional radiographs are to be avoided if a CBCT is justified. (2) Assess the radiation dose risk. Relative radiation level should be considered over the course of orthodontic treatment. Patients must be informed of the risk and benefits of CBCT, considering that CBCT is an ionizing radiation. (3) Minimize patient radiation exposure through proper setting of CBCT parameters, reduction of FOV to match region of interest, use of patient protective shields, and ensuring that CBCT equipment is properly calibrated, maintained, and inspected. (4) Maintain professional competency in performing and interpreting CBCT studies, including the attendance of continuing education courses, compliance with regulatory requirements, and having patients/guardians informed of the limitations of CBCT in visualizing soft tissues, artifacts, and noise.

**American Academy of Oral and Maxillofacial Radiology.** *Oral Surg Oral Med Oral Pathol Oral Radiol* 2013;116:238–257. **References:** 216.

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