

Clinical Guideline on Prescribing Dental Radiographs

Originating Committee

Ad Hoc Committee on Pedodontic Radiology

Review Council

Council on Clinical Affairs

Adopted

1981

Reaffirmed

1997

Revised

1992, 1995, 2001

The American Academy of Pediatric Dentistry (AAPD) endorses the guidelines for prescribing dental radiographs recommended by the Dental Radiographic Patient Selection Criteria Panel, US Department of Health and Human Services.^{1*}

These guidelines are contained within the table on the next page. "The recommendations in this chart are subject to clinical judgment and may not apply to every patient. They are to be used by dentists only after reviewing the patient's health history and completing a clinical examination. The recommendations do not need to be altered because of pregnancy."

References

1. Joseph LP. *The selection of patients for x-ray examinations: Dental radiographic examinations*. Rockville, Md: The Dental Radiographic Patient Selection Criteria Panel, DHHS, Center for Devices and Radiological Health; 1987. HHS Publication No. FDA 88-8273.

*Guideline undergoing revision by the American Dental Association (ADA) and Food and Drug Administration (FDA).

Clinical Guidelines for Prescribing Dental Radiographs*

Patient category	Child		Adolescent		Adult	
	Primary dentition (prior to eruption of first permanent tooth)	Transitional dentition (following eruption of first permanent tooth)	Permanent dentition (prior to eruption of third molars)	Dentulous	Edentulous	
New patient* All new patients to assess dental diseases and growth and development	Posterior bite-wing examination if proximal surfaces of primary teeth cannot be visualized or probed	Individualized radiographic examination consisting of periapical/occlusal views and posterior bite-wings or panoramic examination and posterior bite-wings	Individualized radiographic examination consisting of posterior bite-wings and selected periapicals. A full-mouth intraoral radiographic examination is appropriate when the patient presents with clinical evidence of generalized dental disease or a history of extensive dental treatment.	Full-mouth intraoral radiographic examination or panoramic examination		
Recall patient* Clinical caries or high-risk factors for caries†	Posterior bite-wing examination at 6-mo intervals or until no carious lesions are evident		Posterior bite-wing examination at 6- to 12-mo intervals or until no carious lesions are evident	Posterior bite-wing examination at 12- to 18-mo intervals	Not applicable	
No clinical caries and no high-risk factors for caries†	Posterior bite-wing examination at 12- to 24-mo intervals if proximal surfaces of primary teeth cannot be visualized or probed	Posterior bite-wing examination at 12- to 24-mo intervals	Posterior bite-wing examination at 18- to 36-mo intervals	Posterior bite-wing examination at 24- to 36-mo intervals	Not applicable	
Periodontal disease or a history of periodontal treatment	Individualized radiographic examination consisting of selected periapical and/or bite-wing radiographs for areas where periodontal disease (other than nonspecific gingivitis) can be demonstrated clinically	Individualized radiographic examination consisting of selected periapical and/or bite-wing radiographs for areas where periodontal disease (other than nonspecific gingivitis) can be demonstrated clinically	Individualized radiographic examination consisting of selected periapical and/or bite-wing radiographs for areas where periodontal disease (other than nonspecific gingivitis) can be demonstrated clinically		Not applicable	
Growth and development assessment	Usually not indicated	Individualized radiographic examination consisting of a periapical/occlusal or panoramic examination	Periapical or panoramic examination to assess developing third molars	Usually not indicated	Usually not indicated	

The recommendations contained in this table were developed by an expert dental panel comprised of representatives from the Academy of General Dentistry, American Academy of Dental Radiology, American Academy of Oral Medicine, American Academy of Pediatric Dentistry, American Academy of Periodontology, and the American Dental Association under the sponsorship of the Food and Drug Administration (FDA). The chart is being reproduced and distributed to the dental community by Eastman Kodak Company in cooperation with the FDA.

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* Clinical situations for which radiographs may be indicated include:

A. Positive historical findings

1. Previous periodontal or endodontic therapy
2. History of pain or trauma
3. Familial history of dental anomalies
4. Postoperative evaluation of healing
5. Presence of implants.

B. Positive clinical signs/symptoms

1. Clinical evidence of periodontal disease
2. Large or deep restorations
3. Deep carious lesions
4. Malposed or clinically impacted teeth
5. Swelling
6. Evidence of facial trauma
7. Mobility of teeth
8. Fistula or sinus tract infection
9. Clinically suspected sinus pathology
10. Growth abnormalities
11. Oral involvement in known or suspected systemic disease
12. Positive neurologic findings in the head and neck
13. Evidence of foreign objects
14. Pain and/or dysfunction of the temporomandibular joint
15. Facial asymmetry
16. Abutment teeth for fixed or removable partial prosthesis
17. Unexplained bleeding
18. Unexplained sensitivity of teeth
19. Unusual eruption, spacing, or migration of teeth
20. Unusual tooth morphology, calcification, or color
21. Missing teeth with unknown reason

† Patients at high risk for caries may demonstrate any of the following:

1. High level of caries experience
2. History of recurrent caries
3. Existing restoration of poor quality
4. Poor oral hygiene
5. Inadequate fluoride exposure
6. Prolonged nursing (bottle or breast)
7. Diet with high sucrose frequency
8. Poor family dental health
9. Developmental enamel defects
10. Developmental disability
11. Xerostomia
12. Genetic abnormality of teeth
13. Many multisurface restorations
14. Chemo/radiation therapy