

Management of Dental Erosion: Foundational Articles and Recommendations

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Background

Dental erosion is defined as the irreversible loss of tooth structure due to chemical dissolution by acids not of bacterial origin. The acid source can be intrinsic (e.g. gastric acid) or extrinsic (e.g. dietary acids). The primary dentition is more susceptible to erosion compared to the permanent dentition due to its thinner and less mineralized enamel. In

pediatric patients, dental erosion on the molars is more common with GERD and dental erosion on the lingual of the upper incisors is associated with bulimia. Dental erosion from dietary acids can appear on any tooth surface dependent upon how the individual drinks, chews, swishes, gargles or holds the acidic beverage or food in their mouth.

IAPD Recommendations

1. Once dental erosion is observed, the location and level of erosion should be documented by utilizing an appropriate scale. At each subsequent dental visit, dental erosion should be monitored, documented, and managed.

Consensus-based statement › Global agreement 87%

2. The etiology of dental erosion should be explored. Acidic dietary exposures, history of gastroesophageal reflux disease (GERD) and bulimia should be considered.

Consensus-based statement › Global agreement 100%

3. If dietary acidic exposure is the cause of dental erosion, then the patient should be counseled to reduce acidic food and beverages.

Consensus-based statement › Global agreement 97%

4. One should avoid swishing any acidic beverages to avoid erosion of the facial surfaces of all teeth.

Consensus-based statement › Global agreement 96%

5. If the child reports symptoms of GERD (e.g. stomach aches, hot burps, heart or throat burning) referral to their medical provider should be made.

Consensus-based statement › Global agreement 96%

6. If bulimia is suspected as the cause of erosion, referral to the patient's medical provider is indicated.

Consensus-based statement › Global agreement 96%

7. Patients with erosive tooth wear should use an additional fluoride source like toothpaste or rinse preferably containing stannous fluoride.

Consensus-based statement › Global agreement 87%

8. If the dental erosion is progressing, then the etiology needs to be re-addressed and appropriate management offered.

Consensus-based statement › Global agreement 100%

9. Restorative intervention of non-carious teeth with erosion should be delayed, if possible, to allow for monitoring.

Consensus-based statement › Global agreement 71%

10. Erosive lesions causing pain should be treated with the appropriate restorative material to eliminate pain.

Consensus-based statement › Global agreement 87%