

# Dental Erosion

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## Introduction

- Dental erosion is a multifactorial process leading to the loss of enamel and dentine, involving acid dissolution which is not related to the presence of bacteria, and may affect all age groups. It is becoming increasingly significant in the long-term management of the dentition.
- Sources of acid may be extrinsic (predominantly dietary) or intrinsic (predominantly gastric).
- Diagnosis may be complicated by concurrent tooth structure loss from abrasion, attrition or abfraction.
- Smooth, clean lesions with rounded margins suggest that they are actively progressing; stained lesions suggest that they are inactive.
- Restorations (particularly amalgam or gold) with margins above the tooth surface, and 'cupping' dentine lesions, are strongly suggestive of a diagnosis of erosion.
- Saliva, particularly the unstimulated flow rate and buffering capacity, are important modifying factors.
- There are differences between countries in the classification and diagnosis of noncarious tooth loss.

## Statement

- An accurate diagnosis of the aetiology is essential for successful management.
- An incorrect diagnosis regarding the contributions of abrasion, attrition, abfraction and erosion to specific lesions will result in inappropriate or ineffective treatment.
- All patients should be examined for signs of non-carious tooth tissue loss.
- A severity index is available, and the age of the patient will have an impact on its significance.
- Patient education is critical in preventing progress of lesions. Preventive recommendations include:
  - identify sources of acid; take appropriate action to reduce or eliminate the source
  - avoid tooth brushing immediately before and after acid challenges
  - use a soft toothbrush and low abrasivity dentifrice
  - use a neutralizing/remineralizing agent before or after an acid challenge (e.g. fluoride, milk, yoghurt, CPP-ACP preparations)
  - stimulate saliva flow

- Accurate longitudinal study models can be used to assess rate of lesion progression.

## References

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