

Erosion

Tooth Tissue Loss

Can occur by:

- Abrasion – tooth wear produced by exogenous material forced over tooth surfaces,
- Attrition – tooth wear produced by direct contact of occlusal forces,
- Abfraction – tooth wear due to tensile forces that are induced by occlusal loads leading to microfractures of cervical enamel, and
- Erosion.

Erosion

- Is the destruction of tooth surfaces due to chemical process (other than bacteria i.e. caries) and is usually found in combination with other forms of tooth tissue loss, especially abrasion;
- The prevalence of erosion is significant and increasing, particularly in youth and children.

Extrinsic Factors

Extrinsic Factors (from outside the body) that contribute to erosion are:

- Dietary (soft drink, acidic fruits, sweets, vinegars etc),
- Medicaments or
- Occupational (wine tasters, swimmers etc).

The most common of which are dietary factors.

Intrinsic Factors

Intrinsic Factors (from inside the body) include:

- GOR (gastro-oesophageal reflux),
- Psychiatric conditions that induce vomiting (bulimia, anorexia), and
- Pregnancy (morning sickness and reflux).

Indirect Factors

- Include: hyposalivation, xerostomia, illegal drugs, dehydration, salivary gland pathology, biological factors and inappropriate oral hygiene measures.

Protective Factors

- Include saliva (composition, buffering capacity and flow rate), acquired pellicle, plaque biofilm.

Erosion

- Erosion is normally caused by a combination of factors.
- Erosion is distinct from caries due to a number of factors including, low plaque levels, position on smooth surfaces rather than pit and fissures, symmetry, texture of tooth appearing smooth, shiny and silky rather than dull and chalky and no discolouration.
- Indices can be used to score erosion for charting and progressive comparison.

Management of Erosion

Consists of preventing future erosion by:

- Managing aetiological factors,
- Remineralising tooth structure, and
- Restoring lost tooth structure.

Dietary Methods of Prevention

- Include reduction of quantity and frequency of erosive food and drinks,
- Reduction in total time of erosive potential food and drink in oral cavity, and
- Rinsing after exposure and stimulation of saliva after exposure.

Oral Hygiene Methods of Prevention

- Include awareness of the effect of toothbrushing post acid exposure,
- Correct oral hygiene with soft toothbrushes and low RDA toothpaste,
- Correct brushing technique, and
- Topical fluoride application with high concentration fluoride gel.

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