

# Caries

## CHALLENGES OF RAMPANT CARIES

**Most caries progresses slowly. However, occasionally a patient will present with very aggressive caries, which from initiation to pulp involvement may take only months. It is extremely important for the dental professional to be able to recognise when such caries is present, so that urgent pulp protection and caries control measures can be applied early.**

### Why caries becomes rampant.

Caries becomes rampant when there is a prolonged imbalance of demineralisation over remineralisation in the oral environment. This may result from an increase in refined carbohydrate consumption or simply from decreased use of fluoride at home. Both of the described possible changes lead to loss of balance towards demineralization. Occasionally rampant caries may occur from repeated exposure of teeth to erosive acids leading to frequent pH drop at the tooth surface. A high concentration of acid can rapidly demineralise even the remineralised surface of a 'white spot' subsurface lesion and turn it into active caries.

The rate of caries progression is likely to increase with increasing imbalance between de- and re-mineralisation levels. Rampant caries reflects an acute lack of tooth protection to counterbalance the caries causing factors.

### Oral features of rampant caries:

- the dentinal base of cavities usually soft and of yellowish colour;
- multiple cavities, at different stages of progression present;
- lesions can develop anywhere, often on surfaces that are usually caries free;
- dentinal sensitivity from untreated lesions;
- sometimes history of frequent replacement and/or new fillings.

Many patients diagnosed with rampant caries have numerous other health or psycho-social problems. Unfortunately poor oral health may be the least of our patients' problems. In some cases, a dental professional may need to assume greater responsibility and to have much wider input in helping a patient.

**A clinician's responsibilities are to assess, focus, teach, assist, demonstrate, encourage and reinforce.**

**Dental professionals need to give emphasis to teamwork and good communication with a patient who plays an important role in that team. Dental professionals may not have any influence over a patient's environment or general health, however, it is possible to equip patients with skills and knowledge that can help them to cope and to improve their oral health.**

### Effective management of rampant caries requires:

- **Early diagnosis of its presence;**
- **Understanding the aetiology of disease; and**
- **Interest and preparedness of the patient in changing preventive health behaviours.**

### The preferable sequence of preventive management is:

- **carrying out urgent pulp protection**
- **developing an individualised preventive program with your patient**
- **implementing the in-office and at-home preventive program**
- **close monitoring of outcomes, with modifications to programs as warranted**
- **carrying out permanent restorative management only after significant level of caries control has been achieved**