

Caries

PRACTITIONER INFORMATION SUMMARY No. 1

It is now possible to help many patients control caries, and this outcome should be the more important criterion for 'successful' dental practice than the provision of good restorations.

Our approach to caries diagnosis and management is undergoing fundamental change. Use of fluorides in various forms has become a turning point in dentistry, prompting us to change our approach to diagnosis and management of caries.

Outcomes of the wide-spread use of fluorides in dentistry:

- significant reduction in caries experience,
- greater potential for reversal or control of early stage lesions,
- considerably slower progression rates of caries when it does develop.

However, at the individual level some people continue to develop caries at a high rate.

Causes of the high caries rate in affected individuals:

- excessive frequency of sugar consumption often complicated by the intake of acidic drinks,
- inadequate fluoride exposure,
- marked deficiencies in natural protection through saliva.

Most frequently combinations of the above factors occur.

An effective management plan:

- requires recognition and complete understanding of the complexity of the caries process,
- is based on a thorough oral examination,

- involves an assessment of the balance between factors causing demineralisation and factors contributing to the tooth protection and repair,
- should include an assessment of current caries activity rate. This assessment helps the practitioner to plan preventive and restorative strategies more effectively,
- should relate to the wider, long term care based on the patient's risk assessment.

Diagnosis

The characteristics of enamel and root surface lesions vary significantly. Use of improved vision (eg. fibre optics and dental loupes) as well as cleaning the tooth surfaces of gross debris and calculus followed by thorough drying make the diagnosis easier.

Diagnosis of caries at its earliest stage is very important. Early detection at the precavitated stage is critical for the preferred management option ie, non-restorative management. The preferred management is aimed at protection or repair of the affected tooth.

Caries diagnosis requires effective use of diagnostic aids and taking a comprehensive patient history. It is useful to assign a 'risk profile' to each patient, to facilitate formulation of the most effective caries management plan.