

FDI policy statement on Minimal Intervention Dentistry (MID) for managing dental caries

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FDI World Dental Federation, Geneva, Switzerland

CONTEXT

Since the appearance of the first policy statement on MID in 2002, its understanding has evolved and evidence-based outcomes of new and existing preventive and restorative treatments have become available.

SCOPE

Visual/tactile assessment instruments and electronically driven devices are available to detect carious lesions and to assess caries risk and activity¹. The development and progression of carious lesions can be controlled. The outcome of the caries activity assessment, together with the usage of predictive power of validated caries risk assessment tools, will guide the dental practitioner in deciding which evidence-based carious lesion controlling measures to use and to determine the tailor-made recall sessions.

The demineralisation process of dental caries can be halted largely by the patient reducing the intake and frequency of sugar in the diet and removing the bio-film twice daily with a toothbrush and fluoride-containing toothpaste and dental floss. Evidence-based measures to prevent carious lesions include fluoride in water, in gel, in varnish and paste, and in pits and fissures sealants. Some recently developed measures such as resin infiltration and CPP-ACP paste are promising².

Minimally invasive operative interventions are limited to the removal of friable enamel and soft dentine, which minimalises the cavity size. Sealing such a treated cavity with a quality adhesive dental material will prolong tooth survival³. Evidence has shown that the long-term survival of repaired defective restorations is

as good as that of replaced defective restorations. Replacement is therefore considered over-treatment in many cases while refurbishment and repairing are considered an appropriate minimal invasive operative intervention^{2,4}.

DEFINITIONS

The concept of MID dental caries management is to conserve remineralisable and intact tooth tissue to help retain teeth throughout life. Tooth tissue should not be removed unnecessarily. The major MID components include: (i) early detection of carious lesions and assessment of caries risk and activity; (ii) remineralisation of demineralised enamel and dentine; (iii) optimal measurements to keep sound teeth sound; (iv) tailor-made dental recalls; (v) minimally invasive operative interventions to ensure tooth survival; (vi) repairing rather than replacing defective restorations¹.

PRINCIPLES

The aim of MID is to maintain as much healthy tooth structure as possible and - keep teeth functional for life. This has become all the more important as life expectancy is increasing steadily. People should be able to continue enjoy the full function of a good natural dentition in old age^{5–8}.

POLICY

FDI World Dental Federation supports Minimal Intervention Dentistry (MID) as the contemporary manner to manage dental caries.

DISCLAIMER

The information in this Policy Statement was based on the best scientific evidence available at the time. It

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may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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