FDI POLICY STATEMENT

Topical and Systemic Antibiotics in the Management of Periodontal Diseases

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BACKGROUND

The realization, over the past three decades or so, of the microbial aetiology and specificity of periodontal diseases has led to an increasing use of antimicrobial agents in the management of periodontal infections. These include systemic antibiotics, topical antibiotics and topical antiseptics. Despite such frequent use of antibiotics in the management of periodontal diseases, the literature indicates only a few good controlled clinical trials that compare the efficacy of adjunctive antibiotic use to conventional periodontal therapy alone. This topic continues to generate interests among the dental research and clinical practice communities, especially in view of the global problem of the emergence of antibiotic-resistant organisms. Hence, the knowledge base on the subject is increasing rapidly and, at the time of writing FDI takes the following position:

STATEMENT

- Scientific evidence indicates that conventional periodontal treatment alone is adequate to ameliorate or resolve the clinical condition in the vast majority of patients with periodontal diseases.
- Adjunctive antimicrobial agents delivered either systemically or locally following appropriate diagnosis and thorough mechanical debridement to disrupt the microbial biofilm may enhance the effect of conventional periodontal therapy in appropriately selected patients or specific situations.
- However, adjunctive antibiotics should only be used after a careful evaluation of the patients' clinical condition, medical status and current medications, being cognisant that antibiotics use may be of negligible benefit to the patient whilst, in the longer term, may promote the emergence of antibiotic-resistant organisms in the community.
- Systemic administration of antibiotics may be considered for patients with acute necrotizing ulcerative gingivitis/periodontitis, acute periodontal infections associated with systemic manifestations, aggressive periodontitis, and those who respond poorly to conventional periodontal therapy, or have generalised systemic disease that may affect host resistance, under appropriate clinical circumstances.

- Antimicrobial sensitivity testing may aid in determining the microbial component and antimicrobial susceptibility of suspected pathogens, helping to inform the practitioner in the process of selecting and prescribing an appropriate antibiotic for an individual patient.
- Local delivery of antibiotics may be indicated as an adjunct to mechanical debridement for localised sites with unresolved—infection following conventional periodontal therapy or those with localised recurrent periodontitis.
- The dentist should place the patient on an individually tailored and long-term regular maintenance care programme, after resolution of the particular periodontal condition.
- Optimal plaque control by the patient is of paramount importance for a favourable clinical and microbiological response to any form of periodontal therapy.

KEYWORDS

Antibiotics, general health, periodontal

REFERENCES

1. Mombelli A, Samaranayake LP. Topical and systemic antibiotics in the management of periodontal diseases. *Int Dent J*. 2004; 54:3-14.
2. American Academy of Periodontology. Systemic antibiotics in periodontics. *J Periodontol* 2004; 75:1553-1565.
3. American Academy of Periodontology. American Academy of Periodontology statement of on local delivery of sustained or controlled release antimicromials as adjunctive therapy in the treatment of periodontitis. *J Periodontol* 2006; 77:1458.