

Prevention and Treatment of Caries – Simply Two Sides of a Coin

Caries prevalence is decreasing in many industrialised countries at an encouraging rate, and the scientific knowledge and understanding of the aetiology and pathogenesis of caries has increased considerably in recent times. Despite these welcome developments, the focus of caries management, for many, continues to be on invasive, mechanistic approaches. Since the progression of early caries is generally relatively slow in most patients today, the practice of early, invasive intervention is no longer justified. Noninvasive, prevention-oriented methods that address aetiological factors and microinvasive methods e.g. occlusal sealing and proximal infiltration to heal and seal a lesion, thus hindering the progression of the disease, are considered more promising approaches, with the advantage of limiting further loss of dental hard tissue.

Implementation of the enhanced knowledge base and diagnostic techniques with improved outcomes – not to mention non-, micro- and minimally invasive management options with good success rates – continues to be frustratingly slow worldwide. In addition, not enough is being done to change patients' understanding of the caries process, compliance with preventive regimes and expectations of treatment. Invasive procedures are still viewed by many patients as the only way to manage the caries process; some even believing that drilling and filling will 'cure' caries. Traditional, invasive procedures are consequently honored and perpetuated, be it psychologically (the dentist who drills and fills is a good dentist, because he or she treats the disease actively), to satisfy patient's ill-informed, outdated expectations, or simply as the only way known to successfully fund the practice of dentistry, specifically under outdated third-party funding arrangements which reward invasive treatment rather than prevention. 'Wait and watch' noninvasive therapy is regrettably viewed by many practitioners and patients with a certain amount of skepticism, as are microinvasive procedures. Frequently, practitioners and patients are afraid of an uncontrollable, rapid progression of even early carious lesions, often resulting in premature, invasive intervention. The threat of litigation for 'supervised neglect' is often cited for practitioners adopting the 'if in doubt, cut it out' approach to the management of caries.

Two considerations might help to overcome the problem. First, the traditional dichotomy between prevention, sometimes considered as an indecisive, poor (financial)

option in the repertoire of possible approaches, and therapy should be redirected towards a triad of invasivity for the management of caries.¹ Of course, the degree of caries progression plays a crucial role and it should remain clear that cavitated caries requires (minimal) invasive restoration.² More confidence should, however, be placed in non- and micro-invasive approaches for the management of earlier (non-cavitated) stages of the caries process. Second, the more holistic approach of an evidence-based, equitable use of non-, micro- and minimally invasive options needs to be promoted and 'sold' to the dental profession and in turn to patients, who become confused in the 'jungle' of dental advertising and marketing. In our view, the practitioner needs to shift away from being the traditional dentist towards being an oral healthcare professional who, on the one hand, is capable of providing high quality conservative dentistry when indicated clinically, while on the other hand serves to support the patient in obtaining and maintaining oral health. The classical role played by dental practitioners is now outdated and should be replaced by one based on patient-centered, preventively oriented, minimum intervention (conservative) concepts and approaches. There will still be need for specialists in different aspects of the clinical practice of dentistry, but they should increasingly adopt a supportive role to the key work of the integrative, conservative dental practitioner to help patients obtain and maintain oral health throughout the 'ups and downs' of everyday life. Additionally, dental practitioners should remain the leaders of the primary oral healthcare team, which may usefully include, amongst others, some 'mid-level providers', including dental therapists and hygienists. Failure of dental practitioners and the organisations which represent them to redefine their roles and purpose may open the way for highly undesirable, hugely competitive and confusing markets in oral health-care provision within which patients may become even more disoriented, with the goal of oral health for all being lost in commercial considerations.³

To best serve the future needs and expectations of patients, through teeth and oral health for life, traditional treatment-orientated, mechanistic approaches to managing caries must be put aside in favour of the trend towards patient-centered, preventively oriented, conservative (minimum intervention) oral health care which, despite a growing body of supportive evidence, is presently struggling to gain traction in oral health-care systems across the globe.



REFERENCES

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