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Topic : Managing Dentine Hypersensitivity: A Comprehensive Approach to Diagnosis, Treatment, and Emerging New Technologies

Dentine hypersensitivity (DH) is a significant dental concern, characterized by short, sharp pain arising from exposed dentin in response to external stimuli. Its management requires a comprehensive understanding of its etiology, accurate diagnosis, and tailored treatment strategies. The etiology of DH involves the exposure of dentin due to enamel loss or gingival recession, along with the opening of dentinal tubules that facilitate sensory transmission. Diagnosis involves patient history, clinical examination, and sensitivity testing through air stream and water stimulation.

This lecture will explore various management strategies for different patient groups, including those with gingival recession, tooth wear lesions, and undergoing periodontal treatment. Additionally, the role of adhesion in DH treatment will be examined, emphasizing the importance of selecting appropriate bonding protocols to enhance treatment outcomes. The lecture will compare and analyze various approaches to occlude open dentinal tubules, along with the latest techniques for pulpal nerve desensitization. Emerging therapeutic options, including bioglass, calcium silicate cement, lasers, and casein phosphopeptide, will also be reviewed to provide insights into the future of DH management. These innovative approaches can play a crucial role in overcoming the limitations of traditional treatments and improving patients' quality of life. Finally, the lecture will discuss practical guidelines for prevention and management of DH in routine dental practice, along with the importance of patient education in achieving successful outcomes.