GLOBAL SCIENCE LIBRARY

EDITORIAL

Dental & Craniofacial Research

Waltzing through the New Periodontal Classification Maze

Vrushali Abhyankar*

Assistant Professor, Periodontology, UTHSC, College of Dentistry, USA

It had been an appreciable amount of time since any changes had occurred in the periodontal disease classification. The classification of periodontal disease by Armitage came to practice in 1999 and has been diligently followed ever since then [1]. In the last two decades, the knowledge base of periodontal disease, and a newer but similar disease entity of peri-implant disease, increased by leaps and bounds. There was an immense need to understand and organize this information on the principles of evidence-based dentistry and to come to a consensus that would be followed throughout the world. With this lofty goal in mind, The American Academy of Periodontology along with the European Federation of Periodontology came together last year in November 2017 to organize a world workshop, the proceedings of which were published as "Classification of periodontal and peri-implant disease" in June of 2018 in both the Journal of Periodontology, a flagship journal of American Academy of Periodontology and Journal of Clinical periodontology, a flagship journal of European Federation of Periodontology as 19 review papers and 4 consensus reports [2]. These changes have affected the entire dental community since diagnosis of the patients periodontal status is the very basis of the initial evaluation of the patients' oral condition.

Just as the saying goes, "every new shoe bites in the beginning", initially, it may be hard to navigate through the new classification labyrinth, but understanding and applying it to various case scenarios will ease the process of coming to an accurate diagnosis, the very foundation of comprehensive treatment planning.

To begin with periodontal health was defined as absence of signs of inflammation indicated by <10% of sites with bleeding on probing and probing depths <3mm. Gingivitis was defined as a reversible inflammation indicated by bleeding on probing in more than 10% of sites but probing depths <3mm. Gingivitis was further divided depending on whether it is present an intact periodontium, on a reduced periodontium (E.g. gingival recession cases) or in a successfully treated stable periodontitis patient. The primary etiological factor for the above conditions was considered to be dental biofilm where as a separate category was assigned to non-dental plaque induced gingival diseases like viral, bacterial, autoimmune diseases or numerous other conditions affecting the gingiva not induced by dental plaque [3].

The most decisive changes occurred in the periodontitis classification wherein it introduced the staging and grading system for the disease similar to the one used in oncology for classification of cancers. Periodontitis is now no longer divided into its two forms- chronic and aggressive; as evidence suggests, it is essentially the same disease process with differing rates of extent, progression and severity. The stages of Periodontitis namely I, II, III and IV were based on severity and complexity of management. The extent and distribution was either localized, generalized or molar incisor distribution and grades either A, B or C denoted the rate of progression which was either slow, moderate or rapid respectively. Necrotizing periodontal diseases and Periodontitis as a manifestation of systemic diseases was classified as other different forms of periodontitis [4].

For the first time a consensus was also published for the peri-implant diseases, where none existed before. They divided peri-implant diseases into 4 categories of peri-implant health with absence of inflammation, peri-implant mucositis consisted of presence of inflammation but no bone loss, peri- implantitis with presence of inflammation and progressive bone loss and lastly peri-implant soft and hard tissue deficiencies. It is highly intuitive since this classification parallels that of periodontitis as it increases in severity [5].

The new classification is an outcome of the strongest current evidence and our understanding of the disease process. It is ingeniously devised in such a way that, as additional information comes to light it can be easily incorporated in the present system without causing any major overhauls to the classification, as it exists today. Agreed, it does have a learning curve and requires us to unlearn some of the concepts that were ingrained in our brains during our training in dental school, but it is the only scientific way forward for the dental community.

References

1. Armitage GC. Development of a classification system for periodontal diseases and conditions. *Ann Periodontology.*1999;4:1-6.
2. Caton JG, Armitage G, Berglundh T, Chapple ILC, Jepsen S,et al. A new classification scheme for periodontal and peri-implant diseases and conditions - Introduction and key changes from the 1999 classification. *J Clin Periodontol.* 2018;89:S1-s8.
3. Chapple ILC, Mealey BL, Van Dyke TE, Bartold PM, Dommisch H,et al. Periodontal health and gingival diseases and conditions on an intact and a reduced periodontium: Consensus report of workgroup 1 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. *J Periodontol.* 2018;45: S74-S84.

4. Papapanou PN, Sanz M, Buduneli N, Dietrich T, Feres M,et al. Periodontitis: Consensus report of workgroup 2 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. *J Periodontol.* 2018;89:S173-s182.

5. Berglundh T, Armitage G, Araujo MG, Avila-Ortiz G, Blanco J, et al. Peri-implant diseases and conditions: Consensus report of workgroup 4 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. *J Clin Periodontol.* 2018;45:S286-S291.

Correspondence: Vrushali Abhyankar, MDS, MS, Assistant Professor, Periodontology, Diplomate, American Academy of Periodontology, UTHSC, College of Dentistry, 875, Union Avenue, Room C513, Memphis, TN-38163, USA, Tel: (901)-448-6271, Fax: (901)-448-1294, E-mail: vabhyank@uthsc.edu

Rec: Aug. 11, 2018; Acc: Aug. 24, 2018; Pub: Aug. 27, 2018

Dent Craniofac Res. 2018;1(2):10
DOI: gsl.dcr.2018.000010