Over the past 20 years there have been some exceptional advances made in periodontol- ogy. Many of these have led to changes in our thinking and our approach to periodontal therapy. In 1999, the American Academy of Periodontology (AAP) devised a “new” classi- fication system for the periodon- tal diseases. From this some 50 different types of periodon- tal conditions were identified which were considered worthy of individual classification. Clearly this was an unwieldy system and in reality it was dis- tilled down to three main types of plaque-associated periodon- tal diseases: gingivitis, chronic periodontitis and aggressive periodontitis.

While the appropriateness of the terms “chronic” and aggres- sive” have been debated they have served as a framework for understanding systemic health or periodontitis. It also provided a classification system for the peri- odontal conditions which were considered worthy of individual classification. Clearly this was an unwieldy system and in reality it was distilled down to three main types of plaque-associated periodontal diseases: gingivitis, chronic periodontitis and aggressive periodontitis.

Recognition that bacteria are necessary but not sufficient for periodontitis to develop during the 1990’s a very im- portant conceptual advance oc- curred in our understanding of dental plaque and its interaction within the subgingival envi- ronment. The recognition that subgingival plaque existed as a biofilm with its own mi- croenvironmental and communicative properties changed our thinking of how the subgingival microbiota interacted not only with itself but also the host. Notwithstanding this, research through the 1990’s and 2000’s be- gan to question the role of the biofilm and its component bac- teria consortia in the overall process of development of periodontitis. While it was very clear that periodontitis cannot, by itself, be explained by the absence of bacteria, it was becom- ing increasingly obvious that clinically there were some pa- tients who, despite the presence of considerable plaque deposits, had become very compelling. In- deed the relevance of oral health to overall health and general well-being was recognised by the US Surgeon General in a land- mark publication titled “Oral Health in America”. This doc- ument for the very first time articu- lated the importance of oral health in an holistic approach to medical care. Despite the title, it still provides a global whole scene. From this the concept of periodontal med- icine gained further traction and its central hypothesis stated that periodontal infection and environmental components. At present, apart from “plaque- associated” designation, the cur- rent AAP classification is not based on cause-related criteria.

While it has become evident that such a classification system (chronic and aggressive) may be too sim- plistic because of the hetero- geneity of the periodontal dis- eases. Therefore, it may be timely to revisit such a classifi- cation system and determine whether current understanding of the epidemiology and pathol- ogy of these diseases can be used to better define them.

However, it is worth noting that in the past 25 years there have been at least 10 different classification systems proposed, none of which have been fully adopted. Clearly there remain a number of important challenges in this field. Since chronic and aggres- sive periodontitis are hetero- geneous groups of diseases, for example, there will be unique subcategories based on their multifactorial nature basis of microbial, host response and

It remains to be established whether treatment of periodontitis has any impact on systemic conditions...