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Letter to the Editor

Aggressive periodontitis – what exactly is it?

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According to the recent classification of periodontal diseases (Armitage 1999), the diagnosis of ''aggressive periodontitis'' is based on several criteria: lower calculus deposits than in chronic periodontitis, rapid attachment loss with longer quiescent periods, appearance in healthy subjects and detection in families. Whether localized or systemic, aggressive periodontitis occurs in patients around puberty or under the age of 30.

Three types of aggressive periodontitis have afterward been described (Mombelli et al. 2002): a ''secure'' or certain form, an ''uncertain'' or probable form, and an ''insecure'' or possible form. According to the definition:

- Secure aggressive periodontitis is characterized by clinically documented loss of attachment of over 2 mm in under a year, or by a loss of over 2 mm before the age of 18, or by rapid bone destruction documented by X-rays made throughout the year, or by severe bone loss before the age of 18.
- Uncertain aggressive periodontitis is characterized by clinical loss of attachment of over 2 mm, or by severe bone destruction before the age of 30.
- Insecure aggressive periodontitis is characterized by attachment loss with an unclear rate of progression of around 2 mm in over a year, or by bone destruction with an unclear rate of progression.

It must be recognized, however, that an attachment loss variability of only 2 mm cannot be a realistic basis for clinical assessment. Variability this small calls into question the probing procedure itself, and while a methodology of reproducible and comparative measurements has been developed within a university research context, standard clinical acts remain subject to interpretation. This approach would be feasible in clinical practice only if the level of activity – and progression – were correlated with the degree of inflammation, which remains a debatable notion. Moreover, in order for probing to be reliable and significant, it should be performed only after initial inflammation has been reduced, that is, after treatment has been initiated (Dridi et al. 2002). Lastly, specifying a long rest period is purely speculative, as we cannot date the beginning of the pathology – unless we perform early screening and then allow the pathology to develop for a year in order to assess its progress …

The recommendation that we should abandon the notion of age – much discredited owing to uncertainties and difficulties in setting limits – seems legitimate. But this notion nevertheless remains valid (Heitz-Mayfield et al. 2002, Mombelli et al. 2002) for the simple reason that periodontitis diagnosed in a patient aged 18 has a different significance than the same periodontitis in a patient aged 60. If the patient is between 18 and 30 years old, early onset or rapid progression can generally be envisaged, irrespective of exact figures (Meyer et al. 1999). Nor should we forget that periods of rapid development may be observed in all forms of periodontitis (Meyer et al. 1997, Van der Velden 2000).

Setting aside any semantic debate over the use of the terms ''uncertain'' and ''insecure'', it is not surprising that several authors focus on the term ''aggressive'' (Mombelli et al. 2002). Until 2002 – some 3 years after the initial classification – this definition was used only rarely in the literature. And it is not used in nosological descriptions. The new form of pneumonia that appeared recently in different parts of the world was wisely described as ''atypical'', or as ''acute respiratory syndrome''. To our knowledge, no cases of hepatitis or leukaemia have been described as ''aggressive'', even if severe forms do exist.

The general practitioner will doubtless see this as a purely theoretical debate with no real clinical interest. While this is an acceptable response, it marginalizes the real objective – the therapy itself.

If the definition of ''aggressive periodontitis'' resulted in a specific therapy, this approach would be justified. But prescribing antibiotics, for example, with or without an antibiogram, would be distressingly commonplace (Mombelli et al. 2002). It is well known that epidemiological studies have not yet revealed any constant correlation between the different bacteriological parameters that lead to a diagnosis of periodontitis, and of course no research has revealed specific bacterial characteristics in aggressive periodontitis (Kinane & Attstrom 2002).

Hence the definition of ''aggressive periodontitis'' – no longer new – is particularly disputable. The considered opinion any dental clinician would be that this notion is merely a semantic modification of early-onset periodontitis. The same is true for adult periodontitis, which is now defined as ''chronic periodontitis''. This refers to a moderately progressive loss of attachment or bone (Lang et al. 1999) affecting adult subjects (Heitz-Mayfield et al. 2002), a clinical condition which is sufficiently different from aggressive periodontitis.

In the light of the above observations, the logic behind these changes is difficult to understand.

A justifiable classification – which also serves as a means of communication – must be based on the principle of including and studying the clinical forms, etiological research, treatment effects and epidemiological data for similar patients or pathologies. There can be no room in a classification system for interpretation regarding possible diagnoses. Considering the extreme diversity of parameters referred to in the literature, the new periodontal classification poses a real problem.

A subsequent proposal (Van der Velden 2000) suggests that the spread of a disease, its severity, its clinical basis and the patient's age should be grouped together in one diagnosis. With all this data, we are moving in a more realistic direction.

It must nevertheless be admitted that, according to established scientific principles, we are at present unable to devise a valid classification of periodontal diseases. However frustrating this situation may be, one fundamental question remains: is it absolutely essential to classify these pathologies in such a rigid and questionable way in order to obtain effective therapy?

If one thing is certain, it is that we diagnose cases of periodontitis. Having established this irrefutable fact, is it not reasonable simply to assemble the individual characteristics of each case, irrespective of the examinations performed?

The rest is merely literature…

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