Within the limits of this study, most of the marks (80%) were located occlusal to the base of the maxillary mesiofacial cusp. This may suggest that the commissure line could slightly overestimate the amount of posterior tooth display while smiling. However, all volunteers reported their satisfaction with the display of their natural teeth, and the range of mismatch (OM) was small with the maximum value of 1.3 mm. Thus, the commissure line appears to indicate a physiologic and esthetic orientation of the occlusal plane. Further study is needed to verify the validity of this method for the construction of complete dentures.

Conclusions

The commissure line of the mouth may be used to mark the orientation of the occlusal plane. The degree of mismatch of this dynamic landmark to the occlusal plane was within the range of 0.2 to 1.3 mm. The validity of this observation in the construction of complete dentures is still to be determined.

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Literature Abstract

Newly identified pathogens associated with periodontitis: A systematic review

This systematic review focused on the weight of evidence for newly identified periodontal pathogens based on the results of "association" studies according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. This review is especially important given that independent-culture diagnostic methods introduced about a decade ago have pointed to the existence of new periodontal pathogens, but the data of these studies have not been evaluated together. Searches were done on MEDLINE, EMBASE, and Cochrane databases, and included studies up to September 2013. Studies that fit the criteria of *(1)* comparison of microbial data of subgingival plaque samples collected from subjects with periodontitis and periodontal health and *(2)* evaluation at least one microorganism other than the already-known periodontal pathogens were identified. In total, 1,450 papers were identified, with 41 studies being eligible for inclusion. The datasets were extracted and registered in predefined piloted forms. The results of the systematic review revealed moderate evidence (3 to 5 studies) in the literature to support the association of 17 species from the phyla Bacteroidetes, Candidatus Saccharibacteria, Firmicutes, Proteobacteria, Spirochaetes, and Synergistetes. The phylum Candidatus Saccharibacteria and the Archaea domain also seemed to have an association with periodontal disease. The data from this systematic review points out the importance of previously unidentified species in the etiology of periodontitis and might guide future elimination studies (reduction or elimination of the bacteria would be accompanied by clinical improvements) on the actual role of these suspected new pathogens in the onset and progression of periodontitis. It is important to note that this current evidence is based on association studies (higher levels and/or proportions of the species in cases rather than in controls) and the identified bacterial species should not be interpreted as causative of periodontal disease.

Pérez-Chaparro PJ, Gonçalves C, Figueiredo LC, et al. *J Dent Res* 2014;93:846–858. **References:** 60. **Reprints:** M. Feres, Department of Periodontology, Dental Research Division, Guarulhos University, Guarulhos, São Paulo, Brazil. Email: mferes@ung.br—*Loke Weiqiang, Singapore*