ORIGINAL RESEARCH PAPER

Dental Science

KEY WORDS: Occlusion, Tooth wear, Active eruption, Passive eruption

OPINION OCCLUSION AND TEETH WEAR

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ABSTRACT

I believe the attrition is a physiologic process should be occurred imperatively caused by friction of mastication. This loss of enamel substance is very important and necessary to neutralize the damaging effect of active eruption.

INTRODUCTION

We can define the occlusion as following: occlusion is the study of the mandible movements to recognize the forces of which the tooth incurred in terms of their directions, frequencies, severities, and the places of their applications to avoid harmful forces. For example, the diminution of occlusal table leads to direct the forces towards the longitudinal axis of the tooth.

The clinical crown is the part of the tooth that has been denuded of its gingiva and projects into the oral cavity.

DISCUSSION

The tooth does not extract himself, however, its eruption is faster than periodontal tissues (figure 1).

Figure 1: Active eruption.

Active eruption prolongs the period of living.

It is the movement of the teeth in the direction of the occlusal plane.(2) We can add to his definition "and with his periodontal tissues". Whereas, passive eruption is the exposure of the tooth via apical migration of the gingiva.(2) Apposition of bone dose not accompany passive eruption, that is considered a pathologic process caused by chronic inflammation (2) and may be attributed to excessive force. The biologic width in both eruptions remains constant. Passive eruption, as a term, with attrition is erroneous, can better be expressed by "gingival recession", albeit, without attrition becomes valid.

Teeth in a permanent active eruption, the occlusion does not prevent (stop) it, because the occlusal contact is around 17 min/24 h.2,3 Apposition of bone and cementum accompany active eruption, for recompense the attrition. Between the ages of 11 and 70 years, the average thickness of the cementum increases thrice, average thicknesses of 95 µm and 215 µm are at the age of 20 years and 60 years, correspondingly.(2) But that is not enough to recompense the loss of substance caused by attrition.

Attrition is a physiologic process, should be occurred.

What happens if attrition does not occur with aging?

1- Vertical dimension of occlusion increases.
2- Difficulty with swelling and mastication.
3- Trouble of esthetic.
4- Passive eruption causes elongation of clinical crown and lever arm (Figs. 2 and 3).
5- Fracture of post in its lodging (prepared canal).

Figure 2: Passive eruption.

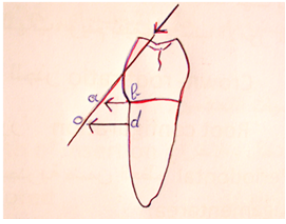
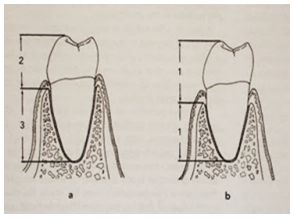


Figure 3: Elongation of clinical crown and its causes of lever arm augmentation and the abutment evaluation decreases.



CONCLUSION

I believe that we should use restoratives materials in oral cavity that can be able to wear, scrap, and should have a hardness similar to enamel. If this material does not able to wear, some damage will be occurred with age.

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