

Dental caries and fluorides in relation to fixed orthodontic treatment: a review.

Abstract:

This paper reviews the cariological aspects of fixed orthodontic treatment and discusses the role played by topical fluorides. During fixed orthodontic treatment, carious lesions may occur in the form of white spots. These may constitute an aesthetic problem. The clinical management of white spot lesions remains unresolved. In order to prevent development of these lesions, the use of topical fluorides is advocated. The need for patient co-operation in the use of self-administered topical fluorides is critical. To reduce this critical need, the use of fluoride-releasing orthodontic cements is recommended. The literature suggests that calcium fluoride, which is the major reaction product on enamel during topical fluoride application, plays an important role in the cariostatic mechanism.