AIM: Several reviews have been published on the effects of medication on tooth movement. This study aimed to synthesize the effect of some of the main drugs on tooth movement.

MATERIALS AND METHOD: A review, using PubMed (1992-Oct 2011), on the effects of medication and dietary supplements on orthodontic tooth movement was carried out.

RESULTS: Ibuprofen, acetylsalicylic acid, flurbiprofen, thiazide diuretics, iriprilavone, progestogens, fluorides and, calcium reduce tooth movement. Anabolic steroids, PGI₂, PGE₂, PGE₁, misoprostol, vitamins D3, K2 and D and corticosteroids stimulate tooth movement. Rofecoxib, acetaminophen, polyunsaturated fatty acids and prednisone seem not to affect tooth movement.

CONCLUSION: At the beginning of orthodontic treatment it is important to know the medication that the patient is taking and how it affects treatment.

FEASIBILITY OF REUSING ORTHODONTIC BANDS AFTER INTRAORAL USE – CONTROL OF CROSS INFECTION

H S M Rodrigues¹, M J F Ponces², M Henriques³, P Mesquita⁴, J M C D Lopes⁵
Departments of ¹Basic Oral Health Science, ²Orthodontics, ³Dental Anatomy and Histology, Dental Faculty of Oporto University and ⁴Department of Biological Engineering, Institute for Biotechnology and Bioengineering, Portugal

AIM: To evaluate the effectiveness of two methods of sterilization and disinfection of orthodontic bands, after use in the mouth. Simultaneously, the protocol of the Department of Orthodontics, Dental Faculty, Oporto University (DO-DFOU) was tested.

MATERIALS AND METHOD: Thirty-five orthodontic bands were placed on the first molars of 10 individuals. They were removed from the mouth and five were separated for the positive control. The remaining 30 bands were immersed in an ultrasonic bath with disinfectant (Elusept®) for 15 minutes and then divided into three groups. The first served as disinfection control, the second and third were subjected to additional sterilization with dry heat (210°C, 30 minutes) and steam (121°C, 33 minutes), respectively. The third group simulated the protocol of the DO-DFOU. Finally, each band was placed in a phosphate buffer saline solution to remove adherent microorganisms and the resulting suspension was inoculated in a nutrient agar. The number of colony-forming units (CFU) was observed in each plate after 4 days of incubation at 37°C. In order to relate the results and meet the international standards, a literature search was performed of the PubMed database using the keywords: cross infection control, orthodontics, orthodontic bands, decontamination, sterilization, disinfection. Twenty-five articles and two books were selected.

RESULTS: The samples used as positive controls presented a high number of CFUs while those that underwent different disinfection treatments did not show CFUs.

CONCLUSION: Considering the methodology used, based on the study of bacterial life forms and that all guidelines for decontamination have been strictly applied, all decontamination methods have proved to be effective and the DO-DFOU protocol is safe. Therefore orthodontic bands can be reused taking into account the guidelines for decontamination.