Evaluation of yeast contamination with orthodontic pliers

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Improper handling of instruments contaminated with body fluids such as saliva and blood, increases the risk of disease and negatively affect the evolution of different treatments, besides the complications that each patient may have due to base diseases.

Objective: To assess the level of contamination by Candida spp., post-use of orthodontics instrumental that is used intraorally in Colombian and Argentinian patients.

Materials and Methods: Patients between 16 and 65 years old, of both sexes, with placement of upper and lower brackets were included. Exclusion criteria: patients with self-ligating brackets with autoimmune diseases, systemic diseases with manifestations in the periodontium, smokers, under 16 and with brackets in one jaw only. We analyzed distal cutting pliers after they were used to transect the distal arch of the last roller in the mouth. We studied 80 patients divided into two groups: Group A: 40 colombian patients, Group B: 40 argentinian patients. One first intraoral take was performed with a sterile swab and was led through a Stuart tube. 4 distal sections of the arches in the mouth were cut taking at least 1 minute. With a second sterile swab we rubbed the surface of the pliers post-use and took them to another tube. We seeded them in Chromagar Candida and conventional microbiological tests were performed.

Results: The sterile forceps appear contaminated post distal cut of the wires in 95% of cases in both countries. There were differences between the Argentine and Colombian patients, regarding the species since in the first the most prevalent species was Candida tropicalis both the clamp and the oral cavity, while the Argentine was Candida albicans.

Conclusion: Orthodontic pliers are contaminated with Cadida spp post-use in mouth and are a fomite from which a systemic dissemination as well as cross-infection can be generated.

Biography

Brusca Maria Isabel has completed her PhD from Buenos Aires a University and postdoctoral studies from Abierta Interamericana University School of Medicine and from Catholic University. She is the coordinator in investigation group of Abierta Interamericana University, and Professor in Buenos Aires University and Abierta Interamericana University. She has published more than 14 papers in reputed journals.

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