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Periodontal disease in patients requiring cardiac surgery

Brusca L, Olavegogeascoechea P, Carballo B, Garriga M B and Brusca M I Universidad Abierta Interamericana, Argentina

Background: Previous study shows that ischemic heart disease and periodontal disease share certain common characteristics. They are more frequent in aged populations, have shared risk factors such as smoking, diabetes, obesity, and show common pathogenic mechanisms (inflammatory elevated levels of pro-phenotypes hyper-inflammatory monocytes, active responses to elevated acute phase). The evidence about the association between chronic oral infections and heart attack in those patients who had experienced a heart attack also showed an unfavorable dental status compared to healthy patients.

Objective: To study the correlation of periodontal disease and microorganisms such as *Prevotella intermedia*, *Porphyromonas gingivalis*, *Candida albicans* and *Staphylococcus aureus* in patients with heart disease with and without surgical indication.

Materials & Methods: Individuals of both sexes, with heart disease with surgical indication were included. The surgical indication is a considered as a dependent variable for cases. For building controls, the individuals with heart disease without surgical indication are also included in equal numbers. Excluded groups are those individuals who present systemic disease but without heart disease, patients with periodontal treatment six months prior to the experience, patients taking anti-inflammatory or antibiotic or antifungal 72 hours prior to the experience.

Results: It was observed that in patients who will go to surgery, *Pseudomonas aeruginosa* was present in 9% of the samples followed by *Candida albicans* with 13%, *Prevotella intermedia* with 4%, *Staphylococcus aureus* with 7%, *Porphyromonas gingivalis* with 4%, adhesion of *Prevotella intermedia* with *Porphyromonas gingivalis* and *Candida albicans* with 2% rate. 3% of the sample showed no development. This would demonstrate a greater percentage of microorganisms present in periodontal disease in patients who will undergo surgery and not those of the control group.

Conclusion: According to the results of diagnosis, a low percentage of the total population is presented as a healthy. What stands out is the abundance of periodontal disease in patients who will undergo heart surgery has a higher percentage of severe infection. This is consistent with the type of microorganisms found with increased virulence in these patients prior to surgery.

Biography

Bruca Maria Isabel has completed her PhD from Buenos Aires a University and postdoctoral studies from Abierta Interamericana University School of Medicineand 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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