

2nd International Conference on DENTISTRY AND ORAL HEALTH

April 15-16, 2019 | Milan, Italy

Liliane Roskamp et al., J Clin Dentistry Oral Health 2019, Volume 3

ASSOCIATION OF *IL6* GENE POLYMORPHISMS WITH EXTERNAL ROOT RESORPTION IN REPLANTED TEETH AND ANALYSIS OF THE CLINICAL ASPECTS INVOLVED

Liliane Roskamp¹, Paula Cristina Trevilatto², Cleber Machado de Souza² and Vânia Ditzel Westphalen²

¹Tuiuti University, Brazil

²Universidade Católica do Paraná, Brazil

Introduction: The presence of resorption on the surface of the root of replanted teeth indicates an immune-inflammatory reaction. Cytokines that are codified by DNA, regulate the immune-inflammatory response of the host. For this reason, it is important to analyze the management of tooth replantation and the genetic characteristics of the patient in order to observe their contribution to the development of tooth resorption.

Aim: The Interleukin 6 (*IL6*) is an inflammatory marker, so this study investigates the association of clinical variables and polymorphisms in *IL6* gene, with the outcome of replanted teeth.

Material & Methods: 94 patients who had their teeth replanted and treated endodontically were selected. Periapical radiographs were taken soon after replantation and after one year. The DNA was collected to determine the *IL6* gene polymorphisms. The analysis was performed by Real Time-PCR. Univariate and multivariate statistical evaluation were used to associate the prognosis of the replanted teeth and their clinical and genetic variables ($p < 0.05$).

Results: It was observed an association of age, extra-alveolar time and storage medium with root resorption in a univariate analysis. The extra-alveolar time and the rs2069843 polymorphism of the *IL6* gene were significantly associated with root resorption in multivariate analysis.

Conclusions: The extra-alveolar time and the rs2069843 in *IL6* gene were associated to the development of root resorption in replanted teeth in the first-year post-trauma.

BIOGRAPHY

Liliane Roskamp has completed her PhD at the age of 53 from Pontifícia Universidade Católica do Paraná, Brazil. She graduated in Dentistry from the Federal University of Paraná and studied two academic years of Dentistry at Université libre de Bruxelles, Belgium. She is specialist in Endodontics and Basic Immunology Clinic Epidemiology (Public Health) and Clinical Diagnostics and Molecular. She has a Master's and a PhD degree in Endodontics. She has experience in the area of Clinical Dentistry with emphasis on Endodontics and Dental Traumatology. She is part time invited Professor at Tuiuti University, Pontifícia Universidade Católica do Paraná and Faculdade Herrero. She works as part time reviewer for *Journal of Periodontology*, *Archives of Oral Biology*, *Journal of Inflammation Research*, *Journal of the American Dental Association* and *Dental Traumatology*. She has published more than 40 papers in reputed journals and annals events.

lroskamp@gmail.com