# Proton Pump Inhibitors and Periodontal Disease: Treatment Considerations for IBD Patients

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## Abstract

### Background

Proton pump inhibitors (PPIs) can be useful in the treatment of clinical manifestations of gastroduodenal (GI) reflux disease, but there is an increased risk of complications in patients with Crohn’s disease and ulcerative colitis (IBD) associated with PPI medications. Albiniz et al. in 2010, noted increase in bone loss in patients with PD.

### Methods

Following IRB approval, medical and dental history records were reviewed from patients aged 10 years old that were referred to SUNY Buffalo’s School of Dental Medicine postgraduate periodontics program for periodontal evaluations from the year 2000 to 2008. They were divided into two groups: Group A was comprised of patients with Crohn’s disease or ulcerative colitis at the time of referral and Group B, which served as the control group and was comprised of patients with no history of IBD but matched for age, gender, smoking status, and alcohol consumption.

### Results

From this retrospective study, we reviewed and approved by the State University of New York at Buffalo. This institutional review board (IRB) approval is (IRB approval #101000181I). We examined medical and dental history records of patients aged 25 years old that were referred to SUNY Buffalo’s School of Dental Medicine postgraduate periodontics program for periodontal evaluations from the year 2000 to 2008. They were divided into two groups: Group A was comprised of patients with Crohn’s disease or ulcerative colitis at the time of referral and Group B, which served as the control group and was comprised of patients with no history of IBD but matched for age, gender, smoking status, and alcohol consumption.

### Conclusions

In patients with chronic, generalized, moderate-to-severe periodontitis, our results suggest that use of PPI is associated with smaller periodontal pocket depths, implying less severe PD. Those findings appear to occur independently of a variety of systemic conditions, and might be due to the ability of PPI to alter the GI microbiota and affect bone metabolism. The data indicate that more conservative periodontal therapy might initially be considered for IBD patients with advanced periodontal disease for whom PPI are prescribed as a component of their IBD treatment.

### Limitations and Future Studies

Since this is a retrospective study, limitations include lack of differentiation between different PPI medications, drug concentration, and length of time each patient was taking PPI. Prospective studies currently are underway to incorporate those variables.

## Methods

The methods used in this study were approved by the State University of New York at Buffalo’s (GihanD) Institutional Review Board (IRB approval #101000181I). We examined medical and dental history records of patients aged 25 years old that were referred to SUNY Buffalo’s School of Dental Medicine postgraduate periodontics program for periodontal evaluations from the year 2000 to 2008. They were divided into two groups: Group A was comprised of patients with Crohn’s disease or ulcerative colitis at the time of referral and Group B, which served as the control group and was comprised of patients with no history of IBD but matched for age, gender, smoking status, and alcohol consumption.

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## Disclosure Statement

The authors have nothing to disclose.

References