INTRODUCTION

Lifetime implant success, in both esthetic and functional categories is a multifactorial process. Connective tissues, hard and soft, play a major role in the health of an implant platform and its associated restoration. While bone loss around the crestal portion of the implant up to 2.0mm within the first year of use is expected. We desire to determine factors which predict bone loss and overall implant success. Many of the factors which can be used to account for such bone loss are inappropriate stresses and force distribution, trauma during surgery, micromechanical movement, infection, and multiple other patient factors. Bone loss has not been linked to a single implant type, placement procedure, or specialty, but remains a significant challenge in the long-term success of implants.

METHODS

Search Strategy: All information will be gathered by an AxiUm system report for implant code D6010 from January 2009-January 2019.

Study Population: The study group consists of all patients of the Dental College of Georgia who have had implant placement within the facility. This will include patients undergoing maxillary and mandibular implants, both single and multisite placement within the January 2009-January 2019 time frame.

Data synthesis: Once the patients who have had dental implant placement are identified, the following information will be extracted from each patient's chart using the electronic medical record:

- Location of implant
- Implant Brand
- Extraction date
- Implant surgery date
- Surgery time
- Follow-up
- Restoration type
- Complication-biologic
- Complication-mechanical
- Age
- Sex
- Specialty
- Bone level immediately/ 6 mos./ 1 yr. Post-operatively

Data Analysis: Statistical interpretation will include T-test, Chi squared analysis, and two-way ANOVA.

Inclusion Criteria: Any type of dental implant placed at this academic institution, within any of the multiple departments.

Exclusion Criteria: None

PURPOSE

To evaluate and compare post implant placement cervical bone loss within the Dental College of Georgia and among its dental specialties. This information will allow us to identify patient's at risk for bone loss therefore improving patient satisfaction and overall success of the implant.

HYPOTHESIS

(1) There is no difference in crestal bone loss in patients who receive dental implants from different manufacturers.
(2) There is no difference in crestal bone loss between the specialists which place the dental implant.