PREOPERATIVE ASSESSMENT OF POTENTIAL IMPLANT SITE IN THE MAXILLA BY MULTIPLANAR REFORMATTED COMPUTED TOMOGRAPHY IMAGING

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ABSTRACT

Anatomic limitations, bone quantity and quality can now be evaluated using more sophisticated radiographic techniques. Computed tomography (CT) together with Dentascan software is the most accurate imaging modality in the implant treatment planning &the follow-up evaluation of the procedure. Multiplanar Reformatted CT (MPR CT) enables the three-dimensional measurements of the bone without overlapping of adjacent structures, which is very useful for preoperative evaluation of the potential implant site.

The aim of this study is to explore the diagnostic value of MPRCT for precise measurement of the bone quantity &quality pre &postoperatively in maxillary potential implant site.

From the result, a detailed complete and comprehensive report will be sent to the surgeon including, bone density, implant length &width, recommended angulation for the implant insertion in relation to location of vital structures in potential implant site

Paired t-test was used to determine the presence of statistical significant differences of the values of the studied variables. The results revealed no statistically significant difference between the accuracy of bone measurements pre &postoperatively for the implant.

INTRODUCTION

The global objective of the pre-prosthetic imaging phase of dental implant is to develop and implement a treatment plan because of their increasing popularity and acceptance by the patients.

Bone quality and quantity are considered important in the consolidation of the bone-implant interface Osseo integration and can influence surgical technique and healing time. The bone quantity is the amount of bone available for implant installation, & performed by measuring the height and width of the alveolar crest in potential implant

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