IMMEDIATE FUNCTIONAL LOADING IN MANDIBULAR POSTERIOR REGION; PROSPECTIVE CLINICAL STUDY

OBJECTIVE:
Immediate functional loading considered an advantage reducing time, cost and second surgery time. Implant design plays a great role to enhance osseointegration; providing an additive. Aim of this study is evaluating the results of an immediate functional loading in single mandibular posterior region.

METHODS:
* Sixteen patients with very restrict inclusion criteria including bone quality, bone quantity and bone angle.
* All patients evaluated by CBCT to identify the selection criteria.
* Eighteen implants (Kontact® Implant - Biotech International - France) were received according to surgical protocol.
* All implants inserted with insertion torque more than 35 N.
* All patients received straight nano post abutments and definitive restoration within 48 hours post implant insertion.
* Radiographic evaluations were performed at the base line and after year to evaluate crestal bone level.
* Three measures were obtained for each implant;

RESULTS:
* Seventeen implants were clinically successful, one implant failed due to infection, yielding a success rate of 95%.
* The radiographic crestal bone levels were expressed in millimeters from the top of implant platform to the first bone to implant contact.
* The radiographic analysis reveals the mean crestal bone level change for one year was 0.45 mm ± 0.10 mm.

CONCLUSION:
With the limitations of this study concerning the sample size; this prospective study indicates that immediate functional loading protocol can achieve a clinically predictable outcome with respect to restricted inclusion criteria of the patients.

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implant length at midaxis and mesial and distal crestal perpendicular bone lengths to the apical end of the implants (used as reference point).
* Mesial and distal crestal perpendicular bone results were standardized with the known midaxis implant length.
* Mesial and distal bone lengths were then averaged and the mean bone level change was computed.