

INPLASY

Does the graft biomaterial influence the time of dental implant placement?

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ADMINISTRATIVE INFORMATION

Support - Self founding.

Review Stage at time of this submission - Data extraction.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202420096

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 February 2024 and was last updated on 22 February 2024.

INTRODUCTION

Review question / Objective In patients requiring surgical placement of dental implants to replace missing teeth (population), what is the ideal time of placement after bone grafting (all types) for anterior and posterior sites (intervention) considering clinical and radiographic parameters, implant primary stability, final white and pink esthetics, histomorphometric analysis and adverse events (outcomes), as reported in RCTs with >10 patients per group (study design)? As control we will consider different types of bone grafting.

Rationale To evaluate the ideal time of implant placement after bone grafts, considering the use of different types of biomaterials.

Condition being studied It is quite common in the context of rehabilitation using implants, the need

to perform bone grafts in regions that lack areas, both in thickness and height. In this scenario, the literature does not define an ideal time for installing dental implants from different types of biomaterials. Therefore, the aim of the work is to try to establish this time. Treatment of bone defects with different types of biomaterials and time to replace dental implants.

METHODS

Search strategy ("dental implant" OR "dental implants") AND ("bone graft" OR "bone-graft" OR "bone grafts" OR "bone-grafts" OR "bone grafting" OR "bone-grafting" OR "bone transplantation" OR "bone regeneration" OR "bone substitutes" OR "alveolar ridge augmentation" OR "Bone Transplantation" OR "socket graft" OR "socket preservation" OR "ridge preservation") AND (autogenous OR autogenic OR autologous OR xenograft OR xenogenic OR xenogenous OR

allograft OR allogeneic OR allogenic OR alloplastic).

Participant or population Patients requiring surgical placement of dental implants to replace missing teeth.

Intervention What is the ideal time of placement after bone grafting (all types) for anterior and posterior sites considering clinical and radiographic parameters, implant primary stability, final white and pink esthetics, histomorphometric analysis and adverse events.

Comparator Bone grafts with different biomaterials used to treat defects before the dental implant placement.

Study designs to be included Randomized Clinical Trials.

Eligibility criteria RCTs with more than 10 patients per group.

Information sources PUBMED, SCOPUS, WEB OF SCIENCE, COCHRANE.

Main outcome(s) Clinical and radiographic parameters, implant primary stability, final white and pink esthetics, histomorphometric analysis and adverse events.

Additional outcome(s) None.

Data management Rayyan software.

Quality assessment / Risk of bias analysis Review Manager 5.4.

Strategy of data synthesis The data will be analyzed with excel tables and if possible with metanalyses.

Subgroup analysis The research will not have subgroups.

Sensitivity analysis Time of implant placement after alveolar bone grafts.

Language restriction Only English studies were accepted.

Country(ies) involved All authors are Brazilians.

Other relevant information None

Keywords dental implant; bone graft; bone regeneration; autogenous; xenograft; allograft; alloplastic.

Dissemination plans None.

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