Short implants in the posterior region; an evaluation after 10 years

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON23463

Source
Nationaal Trial Register

Brief title
Short implants in the posterior region

Health condition

Missing posterior tooth

Sponsors and support

Primary sponsor: University Medical Centre Groningen (Netherlands)
Source(s) of monetary or material Support: Dept of Oral and Maxillofacial Surgery, University Medical Center Groningen

Intervention

Outcome measures

Primary outcome

Change in peri-implant marginal bone level.

Secondary outcome

Implant survival and restoration survival
• Probing pocket depth
• Amount of plaque
• Mucosa condition
• Patient satisfaction

Study description

Background summary

Background
Adaptation of a dental implant to the existing anatomy by using shorter implants is presumed to be a reliable alternative procedure reducing the number and complexity of surgical treatment procedures, treatment time and morbidity. Short dental implants are thought to be a significant asset when aiming for avoiding bone augmentation procedures. Ten-years studies on short implants revealed that results are favourable and that survival rates are comparable to longer implants. However, the number of studies on short implants is limited and much more studies with longer follow-up periods are needed to confirm these positive outcomes.
Main research question
The primary objective of the study is marginal bone level changes by radiological assessments at 10-years follow-up. Secondary objectives are implant and restoration survival, condition of peri- implant mucosa and patients' satisfaction.
Design (including population, confounders/outcomes)
The study design is an observational study of a group of patients which were treated 10 years ago with a short dental implant and an implant-supported restoration because of a missing tooth in the posterior region. Outcomes: primary outcome is the change in marginal peri-implant bone level 10 years after placing the definitive restoration. Secondary outcome measures will be implant and restoration survival, peri-implant mucosa health and patients' satisfaction using a questionnaire.
Expected results
Stable peri-implant bone levels, high implant and restoration survival rate and satisfied patients.

Study objective

The hypothesis is that there is no difference in peri-implant bone change between short implants and longer implants in combination with a sinus elevation procedure

Study design

10-years evaluation of study groups

Intervention

Short implants in the posterior region versus longer implants in combination with a sinus elevation procedure in the posterior region

Contacts

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Eligibility criteria

Inclusion criteria

• Inclusion criteria:
• Patients referred to the department of Oral and Maxillofacial Surgery 10 years ago and treated with a short dental implant and an implant-supported restoration because of having a missing tooth in the posterior region. At the time of treatment:
• The patient was 18 years or older;
• The missing tooth was a premolar or molar in maxilla or mandible;
• Sufficient healthy and vital bone to insert a dental implant with a minimum length of 6 mm and at least 4.0 mm in diameter with initial stability > 45 Ncm
• The implant site was free from infection;
• Adequate oral hygiene (modified plaque index and modified sulcus bleeding index ≤ 1);
• Sufficient mesio-distal, bucco-lingual, and interocclusal space for placement of an anatomic restoration;
• The patient was capable of understanding and giving informed consent.

Exclusion criteria

• Exclusion criteria at the time of treatment:
• Medical and general contraindications for the surgical procedures;

• Presence of an active and uncontrolled periodontal disease;
• Bruxism;
• Smoking
• A history of local radiotherapy to the head and neck region.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-05-2021
Enrollment:	70
Type:	Actual

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	15-03-2021
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL9341
Other	Medical Ethical Committee of the University Medical Center Groningen : METc number METc 2021/166; UMCG RR number 202100182

Study results

Summary results

Guljé FL, Raghoebar GM, Vissink A, Meijer HJA. Single crowns in the resorbed posterior maxilla supported by either 6-mm implants or by 11-mm implants combined with sinus floor elevation surgery: a 1-year randomized controlled trial. Eur J Oral Implantol 2014;7:247-255.
Guljé FL, Raghoebar GM, Vissink A, Meijer HJA. Single crowns in the resorbed posterior maxilla supported by either 11-mm long implants combined with sinus floor elevation or by 6-mm long implants: a 5-year randomised controlled trial. Int J Oral Implantol 2019; 12: 315-326.