

Implant-supported three-unit fixed dental prosthesis using coded healing abutments and fabricated by digital workflow: a 5-year prospective case series study

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Not applicable

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON21760

Bron

NTR

Verkorte titel

Implant-supported three-unit fixed dental prosthesis

Aandoening

missing teeth in the posterior region

Ondersteuning

Primaire sponsor: none

Overige ondersteuning: Department of Implant Dentistry and Oral Surgery, Center for Dentistry and Oral Hygiene, Dental School, University Medical Center Groningen, Groningen, The Netherlands

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Survival of the implants and reconstruction

Toelichting onderzoek

Achtergrond van het onderzoek

Limited evidence exists on the results of implementing recent technical developments, such as coded healing abutments and intra-oral scanners, in the fabrication of multi-unit fixed dental prosthesis (FDP). Similarly, evidence of the usefulness of monolithic zirconia, to combat prosthetic framework fracture and chipping of veneering porcelain, is still limited. This clinical case series study aims to test the applicability of the aforementioned techniques in the fabrication of 3-unit FDP's on two dental implants.

Patients with three missing units in the posterior region of either the maxilla or mandible received two dental implants. After healing, coded healing abutments were placed. Full-arch intra-oral scans were made to produce individual titanium abutments and a 3-unit FDP. Peri-implant tissues were assessed two weeks after placement of the FDP and after five years. Patient reported outcome measures were registered prior to the treatment and after five years. The quality of the FDP's was assessed using modified USPHS (United States Public Health Service) criteria, after five years of service.

Doel van het onderzoek

Not applicable

Onderzoeksopzet

5-year visit of first patient treated: may 2020

5-year visit of last patient treated: june 2022

Onderzoeksproduct en/of interventie

Implant supported 3-unit fixed dental prosthesis

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

This prospective case series study considered all consecutive patients were eligible to participate, if they had at least three adjacent missing teeth in the posterior region of the mandible or maxilla and were treated with a 3-unit FDP on 2 implants. All patients were screened using clinical and radiographic examinations to determine if they met all of the following inclusion criteria:

- over 18 years of age and capable of understanding and giving informed consent;
- sufficient horizontal and vertical space to place a three-unit FDP;
- sufficient bone levels at the proposed implant sites to place implants with a length of at least 8.5mm and a width of 4mm;
- the presence of natural antagonistic teeth or a prosthetic construction.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Any of the following was regarded as a criterion for exclusion from the study:

- uncontrolled pathological processes in the oral cavity;
- known or suspected current malignancy;
- history of radiation therapy in the head and neck region;
- history of chemotherapy within 5 years prior to surgery;
- systemic or local disease, condition or medication that could compromise postoperative healing and/or osseointegration;
- is a smoker (and intends to continue);

- regular alcohol and/or drug use.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-05-2020
Aantal proefpersonen:	60
Type:	Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Positief advies	
Datum:	06-02-2020
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL8357
Ander register	METc UMCG : M13.145175

Resultaten

Samenvatting resultaten

Implant-supported three-unit fixed dental prosthesis using coded healing abutments and fabricated by digital workflow: a 1-year prospective case series study

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