

The long-term effect of full-mouth tooth extraction on the oral microflora

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The aim of this study is to analyze the long-term effect of full-mouth tooth extraction on the oral microflora, using the 16S next-generation sequencing technique.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Bacterial infectious disorders
Study type	Observational non invasive

Summary

ID

NL-OMON42908

Source

ToetsingOnline

Brief title

full-mouth tooth extraction

Condition

- Bacterial infectious disorders

Synonym

gum disease, periodontitis

Research involving

Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Groningen

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: edentulism, microbiology, tooth extraction

Outcome measures

Primary outcome

Change in relative abundance of bacterial species over time as analysed by 16S next generation sequencing technique.

Secondary outcome

NA

Study description

Background summary

From previous research it is known that elimination of the subgingival environment by extraction of all natural teeth significantly changes the oral microflora, including the reduction of the periopathogens *Aggregatibacter actinomycetemcomitans* and *Porphyromonas gingivalis*. However, the long-term effects of full-mouth tooth extraction on the oral microflora are unknown. It would be interesting to know these long-term effects because nowadays many fully edentulous subjects receive dental implants. The presence of certain periodontal pathogens might pose a risk for dental implants.

Study objective

The aim of this study is to analyze the long-term effect of full-mouth tooth extraction on the oral microflora, using the 16S next-generation sequencing technique.

Study design

The present study is a prospective cohort study. Patients that have previously participated (4-5 years ago) in a study evaluating the short-term effects of full-mouth tooth extraction on the oral microflora (De Waal et al. 2015, METC 2012.097) will be contacted for participation in the present study. During the 5 years follow-up examination microbiological samples from various locations in the oral cavity will be obtained in the same manner as it has been done during the previous examinations. Additionally, patients will be asked for permission to use the previously collected samples for new analyses.

Study burden and risks

There are no risks involved with participation in this studie. To minimize the burden, the research appointment will be combined with regular visits to the patients own dentist if possible.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

- the patient has participated in the previous study (METC 2012.097)
- the patient is capable of understanding and giving informed consent

Exclusion criteria

- Chemotherapy in the previous 6 months;
- Systemic or local use of antibiotics in the oral cavity during the last 3 months;
- Use of anti-septic / antimicrobial therapies (including mouthrinses) in the oral cavity during the last 4 weeks;

Study design

Design

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Prevention

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 02-11-2016

Enrollment: 30

Type: Actual

Ethics review

Approved WMO

Date: 25-10-2016

Application type: First submission

Review commission: METC Universitair Medisch Centrum Groningen (Groningen)

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
CCMO	NL58377.042.16