# The relationship between the incidence of gingival abrasion and the presence of gingival recession in both manual and power brush users.

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The aim of the study is to assess the relation of gingival abrasion to recession in both manual and power brush users.

Ethical reviewApproved WMOStatusPendingHealth condition typeOther conditionStudy typeObservational non invasive

# Summary

### ID

NL-OMON34566

**Source** ToetsingOnline

#### **Brief title**

Gingival abrasion and recession in both manual and power brush users

### Condition

Other condition

Synonym gingival abrasion

#### **Health condition**

Gingival abrasion and gingival recession

#### **Research involving**

Human

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### **Sponsors and support**

**Primary sponsor:** ACTA Dental Research BV **Source(s) of monetary or material Support:** Industrie,Procter & Gamble

#### Intervention

Keyword: Abrasion, Bleeding, Plaque, Recession

#### **Outcome measures**

#### **Primary outcome**

Gingival abrasion (GAS): Van der Weijden et al. 2004

Gingival recession (GR)

#### Secondary outcome

Plaque index: Turesky modification of the Quigley & Hein 1962 en Paraskevas et

al. 2007 (TQHPI)

Gingivitis (BOMP): Van der Weijden et al. 1994 en Lie et al. 1998

Probing pocket depth (PPD)

# **Study description**

#### **Background summary**

Gingival recession, exposure of the root surface due to apical migration of the gingival margin, affects a significant amount of the population. Recession can be generalized as the result of destruction of tissue due to inflammatory disease but can also be localized and mulitfactorial of aetiology (Smith 1997 PMID: 9083906). Toothbrushing is considered to predispose localized recession (Boyle 1950, Miller 1950, Gorman 1967 PMID: 5230025) (Rajapakse 2007 PMID: 17953693). It is also known that toothbrushing can cause gingival abrasion (Breitenmoser 1979 PMID: 374707). However, to what extant gingival abrasion caused by toothbrushing is associated with inducing gingival recession remains to be unclear (Addy & Hunter 2003 PMID: 12875306)

#### **Study objective**

The aim of the study is to assess the relation of gingival abrasion to recession in both manual and power brush users.

#### Study design

The study is a single- center, examiner- blind, cross- sectional study design, comparing gingival abrasion, recession, pocketdepth and plaque removal in manual and power brush users. Study will consist of one study visit. Subjects are not allowed not to brush their teeth for 48 hrs prior the examination to allow plaque to accumulate and to resolve any abrasional effects of previous brushing exercises on the gingival tissues. First gingivitis will be assessed. Subsequently plaque and gingival abrasion will be evaluated prior and after brushing (subjects will brush their teeth with their own brush in their habitual manner). Subsequently recession, probing pocket depth will be evaluated.

#### Intervention

toothbrushing

#### Study burden and risks

Risk for subjects: none

# 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**

\* \* 18 years, \* 35 years \* Systemically healthy \* minimum 5 teeth per quandrant \* continuously use of power and manual brush \* not participate in other oral care study

## **Exclusion criteria**

\* Pregnancy or nursing \* active treatment for periodontal disease \* antibiotica usage three months prior to study initiation \* no orthodontic appliances \* no removable (partial) dentures \* perio/ oral piercings \* Needing of antibiotic prophylaxis prior to dental visit \* any systemic diseases, such as HIV or diabetes

# Study design

### Design

Study type: Observational non invasive		
Masking:	Open (masking not used)	
Control:	Uncontrolled	
Primary purpose:	Diagnostic	

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	30-06-2010
Enrollment:	200

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Type:

Anticipated

# **Ethics review**

Approved WMO Application type: Review commission:

First submission METC Amsterdam UMC

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

ID: 24750 Source: Nationaal Trial Register Title:

### In other registers

Register	ID
ССМО	NL32494.018.10
OMON	NL-OMON24750