# Is it effective and cost-effective to seal dental caries instead of "drilling and filling"?

No registrations found.

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

## **Summary**

### ID

NL-OMON21227

**Source** Nationaal Trial Register

#### **Health condition**

Dental caries progression, caries lesion management, cost-effectiveness

### **Sponsors and support**

**Primary sponsor:** University Medical Centre Groningen. Centre for dentistry and oral hygiene. Groningen, The Netherlands. **Source(s) of monetary or material Support:** ZonMW, Den Haag, The Netherlands

### Intervention

### **Outcome measures**

#### **Primary outcome**

- first-attempt success rate

#### Secondary outcome

- caries progression after two years

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- cost-effectiveness from both a medical and societal perspective
- differences in QALYs (CHU-9D)
- differences in dental fear (CFFS-DS)

# **Study description**

#### **Background summary**

The past 5 years, there is gaining evidence that occlusal dental caries can be inhibited or stopped by sealing the lesion rather than removing all carious tissue and placing a restoration.

This study aims to assess the effectiveness and cost-effectiveness of sealing occlusal ICDAS 3 and 4 lesions by comparing the sealing method with care as usual (placing a restoration).

#### **Study objective**

Dental caries lesions (with ICDAS Codes 3 and 4) can be treated by sealing, offering a less invasive and less costly treatment option with the same results as preparation and restoration of the carious lesions.

### Study design

T=0: start of intervention

T=1: control after 12 months

T=2: end of the trial

#### Intervention

Intervention group:

cleaning occlusal surface with rotating brush pumice, isolation of tooth (rubberdam), placement of resin-based sealant after etching

Control group (care as usual)

local anesthetic, isolation (rubberdam), preparation / excavation with rotating instruments, restoration with composite resin or compomer restoration material.

# Contacts

#### Public

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# **Eligibility criteria**

### **Inclusion criteria**

Age 3-18 years

Caries lesions in occlusal surface

Lesion stage ICDAS 3 and 4

### **Exclusion criteria**

Under 3 years / over 17 years

Caries lesions in other surfaces

Lesion stage ICDAS 0, 1, 2, 5 and 6

# Study design

# Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	15-12-2017
Enrollment:	300
Туре:	Actual

### **IPD** sharing statement

### Plan to share IPD: Yes

# **Ethics review**

Positive opinion	
Date:	
Application type:	

24-07-2017 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	NL6405
NTR-old	NTR6580
Other	ZonMw, 's Gravenhage : 843001810

# **Study results**