# Evidence-based prevention of dentine hypersensitivity: A randomized controlled trial to test three interventions

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
28/09/2007		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
28/09/2007	Completed	[X] Results		
<b>Last Edited</b> 26/04/2016	<b>Condition category</b> Oral Health	[] Individual participant data		

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

**Prof Paul Brunton** 

#### Contact details

Leeds Dental Institute Clarendon Way Leeds United Kingdom LS2 9LU +44 0113 3436182 p.a.brunton@leeds.ac.uk

# Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N0644188383

# Study information

#### Scientific Title

Evidence-based prevention of dentine hypersensitivity: A randomized controlled trial to test three interventions

## Study objectives

1. Despite sensitive teeth being a common problem there is no evidence base for the treatments used with sensitivity returning soon after treatment. Furthermore, the amount of clinical time devoted to the management of hypersensitive teeth is significant. Therefore, an intervention, which is evidence based, simple and conservative, yet produces lasting relief would be desirable. This study investigates how effective

typical treatments are at providing immediate relief for the pain of sensitive teeth.

2. To determine if these treatments are effective over a period of six months.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Leeds East Ethics Committee (UK)

## Study design

Randomised controlled trial

## Primary study design

Interventional

# Secondary study design

Randomised controlled trial

# Study setting(s)

Hospital

# Study type(s)

Prevention

# Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

# Health condition(s) or problem(s) studied

Oral Health: Dentine hypersensitivity

#### **Interventions**

The three test interventions will be:

- 1. No treatment
- 2. Application of a dentine bonding agent
- 3. Use of a desensitising toothpaste

In essence three groups of 25 subjects will be included in the study. As part of their routine examination patients will be screened for sensitive teeth. Having had chance to read the patient information leaflet they will be asked to sign a consent form if they are happy to be included in the study. They will then be randomly allocated to one of the three groups and they will receive one of the three interventions of interest. With the exception of the control these interventions are all approved medical devices that will only be used according to their directions for use. The patients response to the intervention will be tested at follow up examinations.

## Intervention Type

Other

#### Phase

**Not Specified** 

#### Primary outcome measure

Immediate reduction of dental hypersensitivity

# Secondary outcome measures

Prolonged reduction in dental hypersensitivity

## Overall study start date

01/02/2009

# Completion date

01/08/2009

# **Eligibility**

#### Key inclusion criteria

75 patients with at least one tooth sensitive to hot, cold and sweet stimuli, which does not require any operative treatment (i.e. fillings) will be invited to participate in the study. As part of their routine examination patients will be screened for sensitive teeth according to our protocol. Having had chance to read the patient information leaflet they will then be asked to sign a consent form if they are happy to be included in the study.

#### Inclusion criteria:

- 1. At least one sensitive tooth. To be eligible subjects will be required to have at least one test tooth sensitive to an evaporative stimulus greater than 40 mm and less than 80 mm on the 100mm visual analogue scale (VAS).
- 2. Sensitive lesion not requiring restoration
- 3. Good oral hygiene and gingival health

# Participant type(s)

Patient

#### Age group

Adult

Sex

# Target number of participants

75, 25 per group

# Key exclusion criteria

- 1. Under 18 years old
- 2. Sensitivity resulting from a lesion requiring any form of restoration
- 3. Sensitivity arising from heavily restored teeth
- 4. Poor oral hygiene or gingival health

#### Date of first enrolment

01/02/2009

#### Date of final enrolment

01/08/2009

# Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre Leeds Dental Institute

Leeds United Kingdom LS2 9LU

# Sponsor information

# Organisation

Record Provided by the NHSTCT Register - 2007 Update - Department of Health

# Sponsor details

The Department of Health, Richmond House, 79 Whitehall London United Kingdom SW1A 2NL +44 (0)20 7307 2622 dhmail@doh.gsi.org.uk

# Sponsor type

Government

#### Website

http://www.dh.gov.uk/Home/fs/en

# Funder(s)

# Funder type

Government

#### **Funder Name**

Greater Manchester Primary Care RM&G Partnership (ReGroup) (UK)

#### **Funder Name**

Oral Dental Health Research Trust

# Funder Name

NHS R&D Support Funding

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/08/2013		Yes	No