

# Validation of a new dental scoring system to assess the junction in the mouth where the gums meet the teeth

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| <b>Submission date</b><br>06/03/2019   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input checked="" type="checkbox"/> Protocol |
| <b>Registration date</b><br>18/03/2019 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>24/10/2022       | <b>Condition category</b><br>Oral Health          | <input checked="" type="checkbox"/> Individual participant data                                   |

## Plain English summary of protocol

### Background and study aims

This research study has been designed to validate a new clinical scoring system (index) for dentists, which is focused at the junction where the gums meet the teeth. The index has been designed to look specifically for worn surfaces of the teeth and receding gums in this area as this is an increasing problem in the population and can often cause problems, such as sensitive teeth. The researchers are developing the index to act as a guide for dentists on how to manage problems in this area, such as receding gums from toothbrushing too vigorously and sensitivity from exposed dentine near the gum. It is hoped that once this index has been developed, the information can be given to dentists equipping them with better knowledge to advise and treat their patients.

### Who can participate?

Healthy adults (over 18), with a minimum of 10 teeth

### What does the study involve?

Participants attend one appointment which lasts about 30 minutes. The study visit consists of a short oral examination, which is repeated by three different research dentists to ensure they are scoring the same as each other. Each tooth is given two scores (one for the outside surface of the tooth near the cheek and one for the inside surface near the tongue/roof of the mouth) for any areas that show tooth wear and gum recession.

### What are the possible benefits and risks of participating?

There are no direct, immediate benefits from taking part in the study. There are no risks of participating as all procedures and assessments are carried out by experienced and qualified dentists using standard dental instruments.

### Where is the study run from?

Bristol Dental Hospital (UK)

When is the study starting and how long is it expected to run for?  
June 2018 to July 2019

Who is funding the study?  
University of Bristol (UK)

Who is the main contact?  
Dr Barbara Warnes  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Barbara Warnes

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## Additional identifiers

**Integrated Research Application System (IRAS)**  
225373

## Study information

**Scientific Title**  
Cervical Localisation Code - Validation of a new code

**Acronym**  
Cervical

**Study objectives**  
The four cervical localisation codes proposed (0-3) represent clinically distinguishable scenarios which can be scored reproducibly.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**

Approved 18/09/2018 by London - Queen Square Research Ethics Committee, HRA NRES Centre Manchester, Barlow House, 3rd Floor, 4 Minshull Street, Manchester, M1 3DZ, Tel: +44 (0)207 104 8225, 0207 104 8019, Email: nrescommittee.london-queensquare@nhs.net, REC ref: 18/LO/1418

## **Study design**

Single-site cross-sectional observational epidemiological validation study

## **Primary study design**

Observational

## **Study type(s)**

Screening

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

Healthy dentate adult volunteers aged 18 or over

## **Interventions**

This is an observational study. The clinical examination will involve capturing scores for the cervical localisation code on all eligible tooth surfaces, 7-7 both arches (buccal and palatal /lingual). Certain dental exclusions will apply: missing teeth, teeth with gross caries, any tooth surface with crown or bridgework, any tooth surface with a fixed orthodontic appliance and any tooth surface with a large restoration in the proximity of the cemento-enamel junction.

Participants will be randomised by study staff equally to 3 treatment sequence groups using a block randomisation scheme. The 3 investigator dentists are to be labelled A, B and C. Thirteen of the 39 participants will be scored by the 3 dentists in the sequence A-B-C-A, another 3 will be scored by the 3 dentists in the sequence B-C-A-B. The remaining 13 will be scored by the 3 dentists in the sequence C-A-B-C.

## **Intervention Type**

Other

## **Primary outcome(s)**

Inter- and Intra-examiner agreement of the proposed clinical classification (as assessed by the cervical localisation score) of the cervical region using three independent dentists assessing the same participants, in a randomised treatment sequence, at a single timepoint

## **Key secondary outcome(s)**

There are no secondary outcome measures

## **Completion date**

14/07/2019

# **Eligibility**

## **Key inclusion criteria**

1. Healthy participants of either gender
2. Aged 18 or over

3. Understand and are willing, able and likely to comply with all study procedures and restrictions
4. Accept the form of the study and signs a declaration of informed consent
5. Have a minimum of 10 teeth not including implants or teeth with crowns and bridges

**Participant type(s)**

Healthy volunteer

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

39

**Key exclusion criteria**

1. An employee and/or family relative of the investigator dentist
2. Anyone who the investigator's opinion is not suitable to take part in the study

**Date of first enrolment**

06/03/2019

**Date of final enrolment**

24/06/2019

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre****Bristol Dental School**

University of Bristol  
Lower Maudlin Street  
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# Sponsor information

## Organisation

University of Bristol

## ROR

<https://ror.org/0524sp257>

# Funder(s)

## Funder type

Other

## Funder Name

Investigator initiated and funded

# Results and Publications

## Individual participant data (IPD) sharing plan

The data will be stored in the University of Bristol Data Repository. The weblink to the repository is: [data.bris.ac.uk/data](http://data.bris.ac.uk/data) but the researchers do not have a unique link to the data for this study yet. The data will be stored in an 'open' format so anyone can access it. Data will be available after the results have been published in a scientific journal (July 2020, 12 months from the last data collection point). The consent form contains the following statement: 'I understand that the information collected about me will be used to support other research in the future and may be shared anonymously with other researchers'. The clinical trials unit will allocate each participant a unique study ID number. On the CRF only date of birth, gender and participant ID are recorded. The only data stored electronically will identify the scoring numbers by study ID.

## IPD sharing plan summary

Stored in publicly available repository

## Study outputs

| Output type                          | Details     | Date created | Date added | Peer reviewed? | Patient-facing? |
|--------------------------------------|-------------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a>      | results     | 01/09/2020   | 05/08/2020 | Yes            | No              |
| <a href="#">Dataset</a>              |             | 12/04/2021   | 19/10/2022 | No             | No              |
| <a href="#">HRA research summary</a> |             |              | 28/06/2023 | No             | No              |
| <a href="#">Protocol file</a>        | version 2.0 | 14/11/2018   | 24/10/2022 | No             | No              |