

# Gum recession treatment with two different approaches

<b>Submission date</b> 18/01/2021	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 25/01/2021	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 10/01/2024	<b>Condition category</b> Oral Health	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Gum disease is a very common condition where the gums become swollen, sore or infected. If untreated this can lead to receding gums (recession) that can expose the root of the tooth. This study aims to compare two treatments for recession (a tunneled technique or a buccal apical access flap).

### Who can participate?

Adults over 18 years, with receding gums at multiple locations

### What does the study involve?

Participants will be randomly allocated to receive one of the two treatments under investigation. Follow up will be for 1 year.

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

The benefit of participating should be that the patient will reduce their gingival recession and with this improvement, their sensibility and their aesthetic appearance will be improved, they will get a proper access to self-oral proper hygiene and they will reduce the risk of periodontal disease progression.

There is no attached risk from participating in the study. The risk is the same of surgical procedures as bruising, edema, redness, slight bleeding and reasonable pain or discomfort.

### Where is the study run from?

ThinkingPerio Research (Spain)

### When is the study starting and how long is it expected to run for?

August 2018 to August 2023

### Who is funding the study?

Investigator initiated and funded

Who is the main contact?

Dr Erik Regidor Correa, erik@ortizvigon.com

Dr Albero Ortiz-Vigón, alberto@ortizvigon.com

## Contact information

### Type(s)

Public

### Contact name

Dr Erik Regidor Correa

### ORCID ID

<https://orcid.org/0000-0003-3338-6379>

### Contact details

Alameda Urquijo nº 2 - 7ª planta

Bilbao

Spain

48008

+34 662025988

erik@ortizvigon.com

### Type(s)

Public

### Contact name

Dr Alberto Ortiz-Vigón

### ORCID ID

<https://orcid.org/0000-0002-1863-5907>

### Contact details

Alameda Urquijo nº 2 - 7ª planta

Bilbao

Spain

48008

+34 944 15 89 02

alberto@ortizvigon.com

## Additional identifiers

### Clinical Trials Information System (CTIS)

Nil known

### ClinicalTrials.gov (NCT)

Nil known

### Protocol serial number

## Study information

### Scientific Title

Mucogingival treatment of class III gingival recessions with apical buccal access flap: randomized clinical trial

### Acronym

ABA

### Study objectives

Apical buccal access approach without modifying the critical area of interdental papilla allows better results of root coverage without compromising vascularization, while achieving an increase of keratinized mucosa and vestibulum depth. Tunnel approach, as control approach in the study, its a good option in terms of root coverage but its associated to reducing vestibulum depth. Furthermore, the apical buccal access approach is associated with lower patient morbidity and greater satisfaction due to the location of the incision, far from the area to be treated.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Approved 02/08/2018, Ethical Committee of the Basque Country (CEIm de Euskadi [Comité de Ética de la Investigación Clínica con medicamentos] Farmaziako Zuzendaritza / Dirección de Farmacia. Osasun saila / Departamento de Salud. Eusko Jaurlaritza / Gobierno Vasco C/ Donostia-San Sebastián, 1 – 01010 Vitoria-Gasteiz; +34 945 01 64 59; ceic.eeaa@euskadi.eus), ref: PS2018063

### Study design

Multicenter randomized controlled clinical trial

### Primary study design

Interventional

### Study type(s)

Treatment

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

Miller Class III multiple gingival recessions

### Interventions

The test group will be treated with apical buccal access approach and connective tissue graft

Control group will be treated with tunnel approach and connective tissue graft

The intervention will be realized in a single session and the follow-up will be 12 months after the surgical procedure. Randomization will be carried out by means of 5 blocks by a sequence generated by the computer.

### Randomization:

The randomization will be carried out prior to the procedure by the statistician (EGT) but without the operator (AOV) knowing the technique that he will have to use until the moment of the first incision. Assignment to the test or control group is done using a block-based computer algorithm after the inclusion of the patient and prior to the surgical intervention. The randomization treatment assignment is disclosed at the time of the surgical procedure. Each patient included in the study has the same probabilities as the others of being assigned to the test or control group.

### Surgical procedure:

On day 0 the first surgical procedure will be performed, which will include the following phases:  
The stopwatch is activated to measure the intervention time

#### Local anesthesia

Depending on the randomization: incision to the bottom of the vestibule in a semilunar shape / preparation of the beds that will receive the graft by tunneling and connecting all the recessions through the tunnel without making incisions

Elevation of a full thickness flap to create a vascular bed for the graft

anesthetize the posterior palatal area (distal to the premolars) and take a graft that is the length and width of the treated area and is between 1-2mm thick

The stabilization of the grafts will be carried out by means of a dento-anchored suture to the contact points of the previously splinted teeth to be able to suture this way.

Photographic documentation before the incision, after preparation of the bed, after obtaining the graft and after suturing.

Record of the duration of surgery.

Recording the perception of the treatment by the patient with a visual analog scale

Post-surgical instructions

### Post-surgical care:

After surgery, the patient will be offered the possibility of taking analgesics / anti-inflammatories (Enantyum 25 mg every 8 hours) and 0.12% chlorhexidine rinses (2 per day) for two weeks. Patients over 65 years of age and those who regularly take antiplatelet / anticoagulation medications will be offered to take a proton pump inhibitor (Omeprazole 20 mg once daily) for prophylaxis of gastrointestinal bleeding.

Patients will be instructed to carefully brush the intervened area for 4 weeks and two weeks after the surgical procedure, the sutures will be removed after taking photographic records, the perception of treatment by the patient and the amount of analgesics consumed and for how long.

### Follow up:

2 weeks: intra-oral photographs, healing, adverse events, and VAS patient questionnaire along with suture removal

12 weeks: intra-oral photographs

24 weeks: intra-oral photographs, intra-oral radiographs, volumetric scan, measurements of recessions, amount of keratinized gingiva and vestibular depth. VAS patient questionnaire, professional satisfaction questionnaire, maintenance and completion of the study

52 weeks: intraoral photographs, intraoral radiographs, volumetric scan, measurements of recessions, amount of keratinized gingiva and vestibular depth. VAS patient questionnaire, professional satisfaction questionnaire, maintenance and completion of the study

### Intervention Type

Procedure/Surgery

**Primary outcome(s)**

Recession reduction measured by a manual periodontal probe and intraoral scanning at baseline, 6 months and 12 month

**Key secondary outcome(s)**

1. Complete root coverage measured by a manual periodontal probe and intraoral scanning at baseline, 6 months and 12 months
2. Increased vestibule depth measured by a manual periodontal probe and intraoral scanning at baseline, 6 months and 12 months
3. Keratinized gum augmentation measured by a manual periodontal probe and intraoral scanning at baseline, 6 months and 12 months
4. Volume increase measured by a manual periodontal probe and intraoral scanning at baseline, 6 months and 12 months
5. Time spent on both types of procedures measured in minutes intrasurgically
6. Patient satisfaction with the treatment received and its relationship with pre-surgical expectations measured by a Visual Analogue Scale at baseline, 2weeks, 4weeks, 12weeks, 6months and 12 months
7. Analgesia intake measured taking into account the number of analgesic pills consumption by patient self-report at baseline, 6 months and 12 months
8. Aesthetic satisfaction by the clinical examiner measured by a blinded examiner at 6 and 12 months in order to evaluate the visual satisfaction with obtained outcome

**Completion date**

02/08/2023

## Eligibility

**Key inclusion criteria**

1. Informed consent after detailed information
2. Adults at least 18 years of age
3. Patients with multiple recessions ( $\geq 2$  teeth) class III Miller with shallow vestibulum depth and keratinized mucosa
4. Non-molar teeth
5. Upper and lower jaw
6. Healthy or periodontally treated patients
7. Systematically healthy or with fully controlled or stabilized diseases
8. A medical report will be requested to confirm the stabilization of the specific disease
9. General plaque control (FMPS)  $\leq 25\%$

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

34

**Key exclusion criteria**

1. Pregnant or breastfeeding patients
2. Uncontrolled periodontal disease
3. Patients treated with any medication that affects gingival conditions such as causing hyperplasia
4. Alcohol and/or drug abuse
5. Not signing informed consent
6. Molar area

**Date of first enrolment**

01/09/2018

**Date of final enrolment**

01/08/2022

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

Spain

**Study participating centre**

ThinkingPerio Research

Periocentrum Bilbao

Alameda Urquijo street 2, 7th floor

Bilbao

Spain

48008

**Sponsor information****Organisation**

ThinkingPerio Research

**Funder(s)****Funder type**

Other

**Funder Name**

Investigator initiated and funded

## Results and Publications

**Individual participant data (IPD) sharing plan**

All data generated or analysed during this study will be included in the subsequent results publication.

**IPD sharing plan summary**

Other

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Protocol file</a>		19/01/2021	04/02/2021	No	No