

Evaluation of Gelclair® (intraoral gel) application after the surgical removal of black unaesthetic gum

Submission date 11/11/2022	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 13/01/2023	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 13/01/2023	Condition category 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

Black-coloured gums (gingival pigmentation) are a huge aesthetic concern for many individuals, especially for those who have more visible gums during smiling. The gold standard to remove this pigmentation is using a surgical blade which causes an open wound that requires management to prevent pain and infection through applying a protective dressing. The traditional dressing (COE-PAK) has many downsides as it is unstable, unaesthetic and does not promote healing. Gelclair is a therapeutic gel that can be used for healing oral mucosa inflammation after the treatment of gingival pigmentation. For patients with gingival pigmentation, this study aims to assess the effect of Gelclair in comparison to a traditional gingival dressing (COE-PAK) at improving soft tissue healing after the treatment.

Who can participate?

Healthy adults with gingival pigmentation

What does the study involve?

This study involves using surgical treatment of gingival pigmentation using a blade and applying a COE-PAK dressing on one side and Gelclair on the other side.

What are the possible benefits and risks of participating?

Gingival depigmentation can provide the desired aesthetic outcome but may cause some pain and discomfort. Using Gelclair may reduce pain and promote healing after surgical gingival depigmentation.

Where is the study run from?

Damascus University (Syria)

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

March 2021 to December 2022

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Dr Lynn Amasha
Lynn.Amasha@gmail.com

Contact information

Type(s)
Principal investigator

Contact name
Dr Lynn Amasha

ORCID ID
<https://orcid.org/0000-0002-1405-1998>

Contact details
Jaramana
Ghassan Kanafany Street
Damascus
Syria
0000
+963 (0)949382544
lynn.amasha@gmail.com

Additional identifiers

Protocol serial number
1

Study information

Scientific Title
Efficiency evaluation of applying sodium hyaluronate postoperative surgical gingival depigmentation

Study objectives
Gingival pigmentation is considered a main common aesthetic concern. Gingival depigmentation procedures can cause pain and discomfort for patients. Gelclair® is a pharmacological material that is used to manage pain and reduce the healing period for mucositis patients after cancer therapy. This study is designed to evaluate the role of applying Gelclair® in reducing pain and healing time postsurgical depigmentation.

Ethics approval required
Old ethics approval format

Ethics approval(s)

This study is registered at Damascus University in order to get a Master's degree in periodontology. This study did not require ethical approval because the treatment provided is considered a basic treatment for gingival pigmentation and the material used is internationally validated. However, ethical approval is now available.

Approved 01/06/2022, the Medical Trial Ethics Council (MTEC) in Damascus University (PO Box 30621, Damascus, Syria; +963 (11) 339 23223; dl.srd@damascusuniversity.edu.sy), ref: DN-01062022-5

Study design

Interventional split-mouth randomized controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Reducing pain and healing time after surgical gingival depigmentation

Interventions

Randomization takes place through the "flip of a coin" method. The first time is to determine the treatment that will take place in the first week (test or control group), and the second time is to determine the side of the maxilla that will be treated first (since this is a split-mouth study).

The study contains two groups:

The test group: Gelclair dressing

The control group: Coe-Pak dressing

Day 1: removal of the gingival pigmentation of one side of the maxilla. Using a shaving motion, a number 15 blade is used to depigment the gingiva. Then a gingival dressing is applied (either Gelclair or Coe-Pak). The patient is provided with a sheet of paper that contains an assessment for the degree of pain (using Visual Analog Scale [VAS]) to record the pain at 2 and 24 hours, and 2, 3, 4, 5, 6, and 7 days after the surgery.

Note: Gelclair is applied locally after the surgery, and then the patient is instructed to apply the gel four times daily for 1 week. On the other hand, Coe-Pak dressing is applied after the surgery and removed after 1 week.

After 1 week: the surgical removal of the pigmentation will be performed on the other side. Then the other gingival dressing is applied.

This study contains three indices for each study group:

1. Wound Healing Index: after 1, 2, 3, and 4 weeks of the surgery
2. Epithelialization test: after 1, 2, 3, and 4 weeks of the surgery
3. Pain Index: 2 and 24 hours and 2, 3, 4, 5, 6, and 7 days after the surgery

Intervention Type

Procedure/Surgery

Primary outcome(s)

Healing of the soft tissues measured using the Wound Healing Index at the first, second, third, and fourth weeks

Key secondary outcome(s)

1. Epithelization formation measured using the Epithelization test at the first, second, third, and fourth weeks
2. Pain measured using a visual analogue scale (VAS) after the anaesthetic effect and every day for a week

Completion date

01/12/2022

Eligibility**Key inclusion criteria**

1. Class II or III of Hedin's index of gingival pigmentation
2. The absence of any periodontal infliction
3. Good width of attached gingiva
4. The absence of systemic diseases

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

12

Key exclusion criteria

1. Gingival pigmentation as a manifestation of systemic diseases
2. Gingival pigmentation as a side effect of medication consumption
3. Systemic diseases that interfere with the healing of periodontal tissues (diabetes, hyperparathyroidism, etc)
4. Life-threatening diseases
5. Periodontal disease
6. Pregnancy or breastfeeding
7. Smokers
8. Patients who showed no sign of corporation in terms of good oral hygiene
9. Radiation therapy
10. Alcoholics
11. Drugs that interfere with periodontal healing

Date of first enrolment

01/11/2021

Date of final enrolment

01/07/2022

Locations

Countries of recruitment

Syria

Study participating centre**Damascus University**

Faculty of Dental Medicine

Periodontology Department

PO Box 30621

Damascus

Syria

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Sponsor information

Organisation

Damascus University

ROR

<https://ror.org/03m098d13>

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated and/or analysed during the current study will be published as a supplement to the subsequent results publication.

IPD sharing plan summary

Published as a supplement to the results publication