

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 Jun 2026

Comparison of Tensile Strengths of two Absorbable Suture Materials (Chromic gut vs Polyglycolic acid) in Minor Oral Surgeries

Protocol summary

Study aim

Comparison of Tensile Strengths of two Absorbable Suture Materials (Chromic gut vs Polyglycolic acid) in Minor Oral Surgeries

Design

Two arm parallel group randomised trial with non-blind outcome assessment, on 16 patients. Coin toss was used for randomization

Settings and conduct

In this study, 2 types of 4 zero absorbable coated polyglycolate sutures (under the brand name SUPABON from Supa Company, Iran) and Chromic Catgut (under the brand name SUPA CHROMIC from Supa Company, Iran) are used. In this study, 16 patients who need minor oral surgery participate. These patients are randomly divided into two groups of eight. Patients are informed about the research work and informed consent is obtained from them. Chromic gut is used for one group of absorption sutures and Polyglycolic acid suture is used for the other group to suture the edges of the wound. A portion of each suture is cut off before suturing to perform a tensile strength test to determine the amount of tensile strength of the base. This part of the suture, along with the sutures that are removed on the 7th and 10th day after surgery, their tensile strength is measured by the Universal testing machine.

Participants/Inclusion and exclusion criteria

Patients who need minor oral surgery

Intervention groups

In this study, 16 patients who need minor oral surgery participate. These patients are randomly divided into two groups of eight. For one group, chromic gut absorption sutures are used, and for the other group, polyglycolic acid sutures are used to suture the edges of the wound

Main outcome variables

Tensile strength

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200815048413N1**

Registration date: **2020-09-20, 1399/06/30**

Registration timing: **registered_while_recruiting**

Last update: **2020-09-20, 1399/06/30**

Update count: **0**

Registration date

2020-09-20, 1399/06/30

Registrant information

Name

Mahmood Beyki Ghasemi

Name of organization / entity

Country

Iran (Islamic Republic of)

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Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-09-15, 1399/06/25

Expected recruitment end date

2020-10-16, 1399/07/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Tensile Strengths of two Absorbable Suture Materials (Chromic gut vs Polyglycolic acid) in Minor Oral Surgeries

2020-05-09, 1399/02/20

Ethics committee reference number
IR.AJUMS.REC.1399.172

Public title

Comparison of Tensile Strengths of two Absorbable Suture Materials (Chromic gut vs Polyglycolic acid) in Minor Oral Surgeries

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patients who need minor oral surgeries

Exclusion criteria:

Patients who do not return for removing sutures on days 7 and 10 after surgery

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 16

Randomization (investigator's opinion)

Randomized

Randomization description

Patients who refer for minor oral surgery are divided into one of two groups based on coin toss

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Ahwaz Jundishapur University of Medical Sciences

Street address

Ahwaz Jundishapur University of Medical Sciences, Golestan Highway

City

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Province

Khuzestan

Postal code

61357-15794

Approval date

Health conditions studied

1

Description of health condition studied

Tensile strength of absorbable Chromic gut suture

ICD-10 code

ICD-10 code description

2

Description of health condition studied

Tensile strength of absorbable polyglycolic acid suture

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Tensile strength of chromatic gut & polyglycolic acid sutures in Newton

Timepoint

On days 0, 7, 10

Method of measurement

Tensile strength is recorded by Universal testing machine (STM 50 machine from SANTAM Eng.Design.Co. Made in Iran)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: For one group is used chromic gut suture (under the brand name SUPA CHROMIC from Supa company, Iran). One section of each suture is cut off before suturing to perform a tensile strength test to determine the amount of tensile strength of the base. This part of the suture, along with the sutures that are removed on the 7th and 10th day after surgery, their tensile strength is recorded by the Universal testing machine.

Category

Treatment - Devices

2

Description

Intervention group: For one group is used Polyglycolic acid suture (under the brand name SUPABON, Supa company, Iran). One section of each suture is cut off before suturing to perform a tensile strength test to

determine the amount of tensile strength of the base. This part of the suture, along with the sutures that are removed on the 7th and 10th day after surgery, their tensile strength is recorded by the Universal testing machine.

Category

Treatment - Devices

Recruitment centers**1****Recruitment center****Name of recruitment center**

Ahwaz Jundishapur Dental School, Department of Periodontics

Full name of responsible person

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Ahvaz University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

Academic

Person responsible for general inquiries**Contact****Name of organization / entity**

Ahvaz University of Medical Sciences

Full name of responsible person

Leyla Golpasand Hagh

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available