

Clinical Trial Protocol

Iranian Registry of Clinical Trials

03 Aug 2026

Evaluation of the effect of tissue adhesive and suture techniques on the postoperative pain after the tooth extraction

Protocol summary

Study aim

- Evaluation the effect of tissue adhesive and suture techniques on the postoperative pain after the tooth extraction

Design

The clinical trial consisted of two randomized double-blind parallel groups on 18 patients. Random allocation Software version 1 was used for randomization.

Settings and conduct

At Yazd school of dentistry, either the left or right premolar will be randomly extracted by a surgical resident, then it will be sutured using 3.0 Silk thread (Supasil Co., made in Iran). In order to measure the pain intensity after the surgery, each patient will be given a visual analogue scale (VAS) form to complete. The patient will be asked to record their pain intensity on a chart at 5, 12, 24 and 48 hours after the tooth extraction. After two weeks, the patient will be required to attend the school for following steps of the treatment. The patient's first premolar on the other side will be extracted by the resident and the silent tooth will be covered with mucous adhesive. The VAS form will be returned to the patient to record their pain intensity 5, 12, 24 and 48 hours later.

Participants/Inclusion and exclusion criteria

Inclusion criteria : People without systemic disease - No history of allergic to any drugs - With good oral hygiene. At first written consent will be obtained from the patient. Exclusion criteria: Fear of dentistry

Intervention groups

Intervention group 1:Mucosal adhesive Intervention group 2:Suture

Main outcome variables

Pain intensity is the main variable which will be measured based on the Visual Analogue Scale at 5-12-24 and 48 hours after tooth extraction.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210306050604N1**

Registration date: **2021-06-29, 1400/04/08**

Registration timing: **retrospective**

Last update: **2021-06-29, 1400/04/08**

Update count: **0**

Registration date

2021-06-29, 1400/04/08

Registrant information

Name

Mohsen Barzegar

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 35 3820 8342

Email address

m.barzegar@ssu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-04-12, 1400/01/23

Expected recruitment end date

2021-04-13, 1400/01/24

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effect of tissue adhesive and suture techniques on the postoperative pain after the tooth extraction		Secondary Ids
		empty
Public title	Evaluation of the effect of tissue adhesive and suture on the postoperative pain	Ethics committees
Purpose	Health service research	<u>1</u>
Inclusion/Exclusion criteria		Ethics committee
Inclusion criteria:	People without systemic diseases No history of allergies to any drugs With good oral hygiene At first written consent will be obtained from the patient	Name of ethics committee
Exclusion criteria:	Fear of extraction teeth	Ethics committee of Shahid Sadouqi School of Yazd Dentistry
Age	No age limit	Street address
Gender	Both	Dahe Fajr Ave,Shahid Sadouqi School of Dentistry of Yazd
Phase	N/A	City
Groups that have been masked		Yazd
	- Participant - Data analyser	Province
Sample size	Target sample size: 18	Yazd
Randomization (investigator's opinion)	Randomized	Postal code
Randomization description	In this study, 18 qualified patients will be selected. For each patient, the first premolars will be extracted in the first session and the first premolars on the opposite side of the same jaw will be extracted in the second session and additionally the wound will be covered with sutures or mucosal adhesive. All the patients will be numbered (1 to 18). First, using Random allocation software version 1 and block random allocation method, we will determine the random sequence for numbers 1 to 18. For each number, either the mucosal adhesive (A) or sutures (B) interventions will be applied either in the first turn or in the second turn. Totally, 18 pair blocks (an A&B pair block for each patient) will be identified. In order to blind the random allocation, the random allocation list will be given a third party who knows nothing about the interventions and will be asked on the phone to choose intervention A or B for the patient.	8914881167
Blinding (investigator's opinion)	Double blinded	Approval date
Blinding description	In order to blind the study in both directions, the patient and the statistical consultant will not know which side of the tooth is pulled at each stage and which technique is used to cover the wound.	2020-06-22, 1399/04/02
Placebo	Not used	Ethics committee reference number
Assignment	Parallel	IR.SSU.REC.1399.066
Other design features		Health conditions studied
		<u>1</u>
		Description of health condition studied
		Evaluation of the effect of tissue adhesive and suture techniques on the postoperative pain after the tooth extraction
		ICD-10 code
		ICD-10 code description
		Primary outcomes
		<u>1</u>
		Description
		Pain intensity in patients
		Timepoint
		5, 12, 24, and 48 hours after tooth extraction.
		Method of measurement
		By (VAS) Visual Analogue Scale
		Secondary outcomes
		empty
		Intervention groups
		<u>1</u>
		Description
		First Intervention group: After injection of Lidocaine 2% 1.100000(Darou Pakhsh- Iran), one of premolars on the left or right side will be extracted by a surgical resident and it will be sutured using Supasil (3.0 silk thread made in Supa Medical Devices) according to figure eight.

Category

Treatment - Other

2**Description**

Intervention group 2 will attend the school again after two weeks and their first premolar on the other side will be extracted by the resident and the silent tooth will be covered with mucous adhesive. To use mucosal adhesive, first disinfect the wound with normal saline and select the ora-aid mucous adhesive (TBM company, made in South Korea) in the appropriate size. Then dry the wound area with a wet swab, put the adhesive on the silent tooth and press it for 5 to 10 seconds to stick to the wound.

Category

Treatment - Other

Recruitment centers1**Recruitment center****Name of recruitment center**

Shahid Sadouqi School of Dentistry of Yazd

Full name of responsible person

Mohsen Barzegar

Street address

Dahe Fajr Ave

City

Yazd

Province

Yazd

Postal code

8914881167

Phone

+98 35 3621 3870

Email

karbalaeeian.ali@gmail.com

Sponsors / Funding sources1**Sponsor****Name of organization / entity**

Yazd University of Medical Sciences

Full name of responsible person

Maryam Kazemipor

Street address

Dahe Fajr Ave

City

Yazd

Province

Yazd

Postal code

8914881167

Phone

+98 35 3621 3870

Email

karbalaeeian.ali@gmail.com

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

Yes

Title of funding source

Yazd 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**

Yazd University of Medical Sciences

Full name of responsible person

Mohsen Barzegar

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

Dentistry

Street address

Dahe Fajr Ave

City

Yazd

Province

Yazd

Postal code

8914881167

Phone

+98 35 3621 3871

Email

karbakeaian.ali@gmail.com

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

Yazd University of Medical Sciences

Full name of responsible person

Mohsen Barzegar

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

Dentistry

Street address

Dahe Fajr Ave

City

Yazd
Province
Yazd
Postal code
8914881167
Phone
+98 35 3621 3870
Email
karbalaean.ali@gmail.com

Person responsible for updating data

Contact

Name of organization / entity
Yazd University of Medical Sciences
Full name of responsible person
Mohsen Barzegar
Position
Assistant Professor
Latest degree
Specialist
Other areas of specialty/work
Dentistry
Street address
Dahe Fajr Ave
City
Yazd
Province
Yazd

Postal code
8914881167
Phone
+98 35 3621 3870
Email
karbalaean.ali@gmail.com

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