

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

EFFECT OF OCCLUSAL REDUCTION ON POSTOPERATIVE PAIN IN TEETH WITH SYMPTOMATIC APICAL PERIODONTITIS FOLLOWING ENDODONTIC INSTRUMENTATION

Protocol summary

Study aim

The aim of this study was to determine if occlusal reduction can reduce post-operative pain to increase the comfort of the patient.

Design

In this clinical trial once informed consent was taken each subject was allotted a group with the help of lottery method randomization. This was non concealed and non blinded from the subject. Sample collection was done on non- probability consecutive technique. Subjects were asked to record their pain perceived on the visual analogue scale at 24 th hour in both groups. Which was explained to them before hand.

Settings and conduct

Operative dentistry and Endodontic department Rehmat Memorial Dental Teaching Hospital Abbottabad. It was a non blinded study and sample collected on non probability consecutive sampling.

Participants/Inclusion and exclusion criteria

INCLUSION ; Patients having maxillary and mandibular posterior teeth with symptomatic apical periodontitis, teeth that tender to percussion, having moderate to severe pre-operative both gender and age 18 and above are included in the study. **EXCLUSION** ; Teeth with no opposing tooth, and patients presenting with swelling and sinus were excluded.

Intervention groups

In the intervention group 2mm of occlusal reduction of the tooth will be done after first visit of endodontic treatment i.e. cleaning and shaping of canals

Main outcome variables

Pain perceived by the subject at the 24 th hour.
Recorded on the visual analogue scale .

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20171123037603N1**

Registration date: **2023-07-28, 1402/05/06**

Registration timing: **retrospective**

Last update: **2023-07-28, 1402/05/06**

Update count: **0**

Registration date

2023-07-28, 1402/05/06

Registrant information

Name

Asim qureshi Qureshi

Name of organization / entity

Ayub medical and dental college

Country

Pakistan

Phone

+92 340 9053423

Email address

asimovtm@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-07-01, 1400/04/10

Expected recruitment end date

2021-12-30, 1400/10/09

Actual recruitment start date

2022-02-01, 1400/11/12

Actual recruitment end date

2022-10-30, 1401/08/08

Trial completion date

2022-10-30, 1401/08/08

Scientific title

EFFECT OF OCCLUSAL REDUCTION ON POSTOPERATIVE PAIN IN TEETH WITH SYMPTOMATIC APICAL PERIODONTITIS FOLLOWING ENDODONTIC INSTRUMENTATION

Public title

Effect of occlusal reduction on postoperative pain in teeth with symptomatic apical periodontitis following endodontic treatment.

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

Mandibular and maxillary posterior teeth with symptomatic apical periodontitis Teeth that and tender to percussion

Exclusion criteria:

Teeth without an opposing tooth Teeth associated with facial swelling Teeth associated with sinus

Age

From **18 years** old

Gender

Both

Phase

1-2

Groups that have been masked

No information

Sample size

Target sample size: **60**

Actual sample size reached: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

After informed consent taken from the subjects . Each individual was allotted an intervention group with the help of lottery method. This lottery method was conducted with the help of computer software. No concealment was done from the participant.

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The ethical committee at Rehmat Memorial Post graduate Dental Teaching Hospital

Street address

Supply Bazar , Main road

City

Abbottabad

Postal code

224400

Approval date

2021-05-20, 1400/02/30

Ethics committee reference number

REF.NO.WMC/RMDTH/EC/2083

Health conditions studied

1

Description of health condition studied

Patients with mandibular or maxillary posterior teeth with symptomatic apical periodontitis.

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pain perceived by subject

Timepoint

24 hours after the procedure.

Method of measurement

Visual analogue scale (VAS) printed and handed to subject.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Occlusal reduction

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Operative and Endodontic department Rehmat Memorial Dental Teaching Hospital

Full name of responsible person

Dr. Khadija Jahanzeb

Street address

Supply Bazar , Main road

City

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224400

Phone

+92 992 390337

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jahanzeb.khadija@gmail.com

Phone

+92 340 9053423

Email

asimovtm@gmail.com

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

Rehmat Memorial Dental Teaching Hospital.

Full name of responsible person

Dr. Khadija Jahanzeb.

Street address

Supply Bazar , Main road

City

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224400

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+92 992 390337

Email

jahanzeb.khadija@gmail.com

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

Yes

Title of funding source

Rehmat Memorial Dental Teaching Hospital.

Proportion provided by this source

15

Public or private sector

Private

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**

Ayub medical college

Full name of responsible person

Asim qureshi Qureshi

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

Dentistry

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Riaz house hill street opposite hotel one

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Province

Khyber Pakhtunkhwa

Postal code

224400

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

Ayub medical and dental college

Full name of responsible person

Asim qureshi Qureshi

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

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Person responsible for updating data**Contact****Name of organization / entity**

Ayub medical and dental college

Full name of responsible person

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Position

Assistant Professor

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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

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is 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

Not applicable

Data Dictionary

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

Title and more details about the data/document

Only data entered in SPSS/ Excel sheets will be shared not individual sheets.

When the data will become available and for how long

After publication of data it will be available.

To whom data/document is available

Whoever requests the corresponding author with justification for the requirement

Under which criteria data/document could be used

Corresponding author will decided depending on the request. Keeping in mind the best interest of the participants.

From where data/document is obtainable

asimovtm@gmail.com

What processes are involved for a request to access data/document

A informal request to the corresponding authors

Comments