Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 symtomatic 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
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Abbottabad
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224400
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+92 992 390337

Email
jahanzeb.khadija@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Rehmat Memorial Dental Teaching Hospital.
Full name of responsible person
Dr. Khadija Jahanzeb.
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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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Person responsible for scientific inquiries

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Person responsible for updating data

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Latest degree
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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