Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Effect of Dephotphoresis on Bacterial Reduction and Post treatment Pain and Healing of Preapical lesion: A Randomized Clinical Trial

Protocol summary

Study aim
Effect of depotphoresis on bacterial reduction and post treatment pain and healing of priapical lesion
Design
Randomised. parallel group trial with blinded outcom assessment
Settings and conduct
Zahedan dentistry univercity patient with necros tooth in maxilla and mandible and priapical lesion main investigator is blind
Participants/Inclusion and exclusion criteria
Patient with necros tooth with priapical lesion sign consent form without systemic disease
Intervention groups
1-Depotphoresi 2-Laser 3-Control
Main outcome variables
Pain; healing of preapical; clouny count

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20180718040517N1**
Registration date: **2019-01-10, 1397/10/20**
Registration timing: **registered_while_recruiting**

Last update: **2019-01-10, 1397/10/20**
Update count: **0**
Registration date
2019-01-10, 1397/10/20

Registrant information
Name
Maryam Dalaeimoghadam
Name of organization / entity
Country
Iran (Islamic Republic of)
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2018-12-21, 1397/09/30
Expected recruitment end date
2020-06-19, 1399/03/30
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Effect of Dephotphoresis on Bacterial Reduction and Post treatment Pain and Healing of Preapical lesion: A Randomized Clinical Trial

Public title
Effect of Dephotphoresis on Healing of Dental Lesions
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Patient that have necrose teeth in maxilla and mandible with preapical lesions Patient with consentform without any systemic disease without extensive crown decay people with age of betwean 12 and 60 years old
Exclusion criteria:
treatment accident durity therapy complicated canal anatomy
Age
From **15 years** old to **60 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Outcome assessor
- Data analyser

Sample size
Target sample size: **90**
Randomization (investigator's opinion)
Randomized
Randomization description
Randomization by use of computer software and by random block with size of 3 and 6 and attribution proportion 1:1:1in two intervention group and control group are performance. for allocation concealment kind of intervention are written in paper inside pocket numbered .pockets open by investigator respecttively and intervention permormance
Blinding (investigator's opinion)
Single blinded
Blinding description
Personel of laboratory Method of study explain fot patient and explain they may put in one of study group and take them inform consent. fot this during treatmen with depotphoresis laser tip enter to patient mouth and vice versa
Placebo
Not used
Assignment
Parallel
Other design features
use of depotphoresis

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethic committee of zahedan medical university
Street address
Hesabi square
City
Zahedan
Province
Sistan-va-Balouchestan
Postal code
9816743463
Approval date
2018-10-07, 1397/07/15
Ethics committee reference number
IR.ZAUMS.REC.1397.278

Health conditions studied

1

Description of health condition studied
Diseases of oral cavity, salivary glands and jaws
ICD-10 code
K04.5
ICD-10 code description
Chronic apical periodontitis

Primary outcomes

1

Description
Groupes that participate in study
Timepoint
6 h.12h.24h.48.72h after first treatment
Method of measurement
Questionnaire

2

Description
Healing of lesion
Timepoint
6 months.12 months
Method of measurement
Clinical and radiographic evaluation

3

Description
Colony count
Timepoint
1.5 years
Method of measurement
PCR

Secondary outcomes

empty

Intervention groups

1

Description
Depotphoresis(Depotphoresis equipment Humanchemie GmbH Alfeld Germany):the root canal is filled with coper calcium solution(one section copral with 9 section calcium hydroxide) and then a weak electrical current(0.8 to 1.5ma) is sent through a fine probe. 3 time with 5 minute interval.electrical current need in one session.
Category
Treatment - Devices

2

Description
Laser diod with 200 um diameter and power of 2 W are used.laser activated and fiber guided in an apical direction to the coronal area with rotary movement and in contact with the root canal wall.the procedure was repeated 3 time with interval of 2 minutes.
Category

Treatment - Devices

3

Description
Control group with conventional endodontic treatment
Category
Treatment - Devices

Recruitment centers

1

Recruitment center
Name of recruitment center
Dentistry university
Full name of responsible person
Maryam Dalaei Moghadam
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Sponsors / Funding sources

1

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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
Zahedan University of Medical Sciences
Proportion provided by this source
50
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

2

Sponsor
Name of organization / entity
The Research Assistance of Zahedan Medical University
Full name of responsible person
Eshagh Ali Saberi
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Medical University, Dr Hesabi Square
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Https://msrc.zaums.ac.ir
Grant name
Grant code / Reference number
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Yes
Title of funding source
The Research Assistance of Zahedan Medical University
Proportion provided by this source
50
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
Zahedan University of Medical Sciences
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Maryam Dalaei Moghadam
Position
Resident
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
No - There is not a plan to make this available
Informed Consent Form
No - There is not a plan to make this available
Clinical Study Report
No - There is not a plan to make this available
Analytic Code
No - There is not a plan to make this available
Data Dictionary
No - There is not a plan to make this available
Title and more details about the data/document
Effect of depotphoresis on healing of periapical lesion
When the data will become available and for how long
One year after publicasion
To whom data/document is available
Person who are practitioner in university
Under which criteria data/document could be used
-
From where data/document is obtainable
Supervisor
What processes are involved for a request to access data/document
Email
Comments
-