

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

28 May 2026

### Evaluation of the effects of local injection of Dexamethasone on post endodontic pain

#### Protocol summary

##### Summary

Many patients suffer from mild, moderate or severe pain during or after root canal therapy. The purpose of this study was to evaluate the efficacy of supraperiosteal injection of dexamethasone into the periapical tissues to prevent postoperative pain associated with inflammation. In a triple-blind, placebo-controlled clinical trial, 60 patients with moderate or severe pain who are referred to dental school of Mashhad University of Medical Sciences participate in this study. All patients should have a tooth with clinical diagnosis of irreversible pulpitis or pup necrosis without signs of periapical abscess. After administration of local anaesthesia, the standard treatment of RCT complete. Then, one millilitre dexamethasone (8 mg 2 mL(-1)) or placebo was injected around the tooth. The severity of pain was assessed with regard to a modified visual analogue scale after 6, 12, 24 and 48 h. The data was analysed.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201109217608N1**  
Registration date: **2012-12-28, 1391/10/08**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2012-12-28, 1391/10/08

##### Registrant information

##### Name

Neda Naghavi

##### Name of organization / entity

Dental Research Center

##### Country

Iran (Islamic Republic of)

##### Phone

+98 511882950115

##### Email address

naghavin@mums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Mashhad University Of Medical Sciences

##### Expected recruitment start date

2012-02-09, 1390/11/20

##### Expected recruitment end date

2013-03-19, 1391/12/29

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Evaluation of the effects of local injection of Dexamethasone on post endodontic pain

##### Public title

Dexamethasone effect on post endodontic pain

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

inclusion criteria: healthy people(ASA I or II); people need endodontic treatment exclusion criteria: pregnant and lactating women; people under 18; patient with hormonal and infected disorders not related to dental problems; moderate or severe periodontal diseases; acute apical abscesses or acute apical periodontitis; retreatment cases

##### Age

From **18 years** old to **149 years** old

##### Gender

Both

**Phase**

2-3

**Groups that have been masked***No information***Sample size**Target sample size: **60****Randomization (investigator's opinion)**

Randomized

**Randomization description****Blinding (investigator's opinion)**

Triple blinded

**Blinding description****Placebo**

Used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethics Committee in Mashhad University of Medical Sciences

**Street address**

Ghoreishi Building, Daneshgah street, Mashhad

**City**

Mashhad

**Postal code****Approval date**

2012-03-14, 1390/12/24

**Ethics committee reference number**

900607

**Health conditions studied****1****Description of health condition studied**

tooth pain

**ICD-10 code**

K08.8

**ICD-10 code description**

Other specified disorders of teeth and supporting structures

**Primary outcomes****1****Description**

pain value

**Timepoint**

before treatment, 6,12,24,48 hours after treatment

**Method of measurement**

VAS scale

**Secondary outcomes**

empty

**Intervention groups****1****Description**

in intervention group: infiltraton injection of Dexamethasone (4mg/1ml), after completion of root canal treatment in control group: infiltraton injection of placebo ( 1ml ofdistilled water), after completion of root canal treatment

**Category**

Treatment - Drugs

**2****Description**

in control group: infiltraton injection of placebo ( 1ml ofdistilled water), after completion of root canal treatment

**Category**

Treatment - Drugs

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

Faculty of Dentistry/ Mashhad University of Medical Science

**Full name of responsible person**

Dr Neda Naghavi

**Street address**

Faculty of Dentistry, Azadi square, Mashhad

**City**

Mashhad

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

Mashhad University of Medical Sciences

**Full name of responsible person**

Mozhdeh Ghandeharian

**Street address**

Dental School, Azadi Square, Mashhad

**City**

Mashhad

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

Yes

**Title of funding source**

Mashhad University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

*empty*

**Domestic or foreign origin**

*empty*

**Category of foreign source of funding**

*empty*

**Country of origin**

**Type of organization providing the funding**

*empty*

**Person responsible for general inquiries**

**Contact**

**Name of organization / entity**

Dental Research Center

**Full name of responsible person**

Dr. Neda Naghavi

**Position**

assistant professor of Dental Research Center

**Other areas of specialty/work**

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assistant professor of Dental Research Center

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**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Dental Research Center, Faculty of Dentistry

**Full name of responsible person**

Dr. Saeed Moradi

**Position**

Associate Professor of Endodontics

**Other areas of specialty/work**

**Street address**

Endodontics group, Dental School, Azadi Square

**City**

**Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*