

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### Evaluation of the effect of doxycycline 20 mg as an adjunct to scaling and root planing in mild periodontitis patients

#### Protocol summary

2012-05-21, 1391/03/01

#### Summary

Background and aim: Scaling and root planing (SRP) is the base of non-surgical therapies in the management of periodontitis, but low dose doxycycline is recognized to have therapeutic properties that can modulate host response. The aim of the present study was to compare some clinical parameters in patients with mild periodontitis treated by SRP with and without using doxycycline 20 mg. Methods and materials: In this randomized double blind study, 44 patients with mild periodontitis were treated with standard SRP therapy and then randomly received either adjunctive 20 mg doxycycline or placebo for 3 months and twice daily. Inclusion criterion was: having at least 14 untreated teeth with mild periodontitis in two quadrants that need comprehensive treatment. Exclusion criteria were: pregnant women; patients with a history of tetracycline sensitivity; any systemic infection requiring antibiotic prophylaxis for dental procedures; history of intake of tetracycline during the 3 last months; history of periodontal therapy (scaling and root planing or periodontal surgery) during the last 3 months. Before and after treatment clinical parameters including periodontal pocket depth (PPD), clinical attachment loss (CAL), bleeding on probing (BOP) and modified gingival index (MGI) were recorded.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201205058205N2**

Registration date: **2012-05-21, 1391/03/01**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

#### Registrant information

##### Name

Mohammad Reza Amjadi

##### Name of organization / entity

Department of periodontology, Esfahan faculty of dental sciences

##### Country

Iran (Islamic Republic of)

##### Phone

00983112279676-00983117922864

##### Email address

amjadi@dnt.mui.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

Faculty of dentistry, Shahid Sadoghi University of Medical Sciences

#### Expected recruitment start date

2011-07-08, 1390/04/17

#### Expected recruitment end date

2011-11-23, 1390/09/02

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

Evaluation of the effect of doxycycline 20 mg as an adjunct to scaling and root planing in mild periodontitis patients

#### Public title

Clinical effects of subantimicrobial dose doxycycline

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

Inclusion criterion: having at least 14 untreated teeth with mild periodontitis in two quadrants that need comprehensive treatment. Exclusion criteria were: pregnant women; patients with a history of tetracycline sensitivity; any systemic infection requiring antibiotic prophylaxis for dental procedures; history of intake of tetracycline during the 3 last months; history of periodontal therapy (scaling and root planing or periodontal surgery) during the last 3 months.

#### Age

From **25 years** old to **54 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **44**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

#### Blinding (investigator's opinion)

Double blinded

#### Blinding description

#### Placebo

Used

#### Assignment

Single

#### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of Shahid Sadoghi university

##### Street address

Faculty of dentistry of Yazd university of medical sciences, Daheye Fajr Boulevard, Emam Khomeyni street, Yazd

##### City

Yazd

##### Postal code

#### Approval date

2010-08-20, 1389/05/29

#### Ethics committee reference number

424

## Health conditions studied

### 1

#### Description of health condition studied

Clinical effects of subantimicrobial dose doxycycline

#### ICD-10 code

k08.8

#### ICD-10 code description

Other specified disorders of teeth and supporting structures

## Primary outcomes

### 1

#### Description

PPD: The distance between the gingival margin and depth of sulcus

#### Timepoint

Before treatment, 3 months after treatment

#### Method of measurement

Periodontal probe, mm

## Secondary outcomes

### 1

#### Description

BOP: bleeding on probing

#### Timepoint

Before treatment, 3 months after treatment

#### Method of measurement

Periodontal probe, mm

### 2

#### Description

CAL: The distance between cemento-enamel junction (CEJ) and the bottom of pocket

#### Timepoint

Before treatment, 3 months after treatment

#### Method of measurement

Periodontal probe, mm

### 3

#### Description

MGI: a gingival index for evaluation of gingival health

#### Timepoint

Before treatment, 3 months after treatment

#### Method of measurement

Periodontal probe, mm

## Intervention groups

### 1

#### Description

Intervention 2: control group: after scaling and root planing, patients used the placebo (containing starch) twice daily and for 3 months, orally.

#### Category

Treatment - Drugs

### 2

#### Description

Intervention 1: case group: After scaling and root

planing, patients received capsules containing subantimicrobial dose doxycycline (20 mg) twice daily and for 3 months, orally.

### Category

Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Shahid Sadoghi University of Medical Sciences,  
Faculty of dentistry

##### Full name of responsible person

Dr Mohammad Reza Amjadi

##### Street address

Shahid sadoghi faculty of dentistry, Daheye fajr  
Boulevard, Emam Khomeyni street, Yazd

##### City

Yazd

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Vice chancellor for research, Shahid Sadoghi  
University of Medical Sciences

##### Full name of responsible person

Dr Alireza Danesh Kazemi

##### Street address

Vice chancellor for research, Shahid sadoghi faculty  
of dentistry, Daheye fajr Boulevard, Emam Khomeyni  
street, Yazd

##### City

Yazd

##### Grant name

##### Grant code / Reference number

##### Is the source of funding the same sponsor organization/entity?

Yes

##### Title of funding source

Vice chancellor for research, Shahid Sadoghi 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

Isfahan University of Medical Sciences, Faculty of  
dentistry

##### Full name of responsible person

Dr Mohammad Reza Amjadi

##### Position

Assistant professor

##### Other areas of specialty/work

##### Street address

Department of periodontology, Faculty of Dentistry,  
Esfahan University of Medical Sciences, Darvazeh  
Shiraz street, Esfahan

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amjadi@dnt.mui.ac.ir

##### Web page address

## Person responsible for scientific inquiries

#### Contact

##### Name of organization / entity

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#### Contact

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##### Full name of responsible person

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##### Position

Assistant professor

##### Other areas of specialty/work

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**Web page address****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*