

Clinical Trial Protocol

Iranian Registry of Clinical Trials

07 Jul 2026

The effect of adjunctive low-dose doxycycline and licorice therapy on gingival cervicular fluid matrix metalloproteinase-8 levels in chronic periodontitis

Protocol summary

Summary

Aims: Comparing the effect of adjunctive low dose doxycycline and licorice on gingival cervicular fluid matrix metalloproteinase-8 levels in patients with chronic periodontitis. Study design: Interventional, Double blind, Placebo usage, Uni-center. a- Study population: No age limit, no sex limit. Inclusion criteria: chronic mild to moderate periodontitis. Exclusion criteria: Patients with any infectious or systemic diseases; no drug usage at all; pregnant, breast feeder patients; patients allergic to antibiotics; no scaling and root planning or periodontal surgeries in the last six months; no usage of herbal or antibiotic drugs during the last six months; Smokers, alcoholics; patients with poor oral hygiene or patients with poor compliance Sample size:39 patients b- Intervention/Control: Intervention: One 20mg Capsule of Doxycycline per day for six weeks Intervention: One 400mg Tablet of Licorice per day for six weeks Control: One Placebo Capsule per day for six weeks Time of intervention: 6 weeks. Primary or under study outcome measures: concentrate of MMP-8 in gingival cervicular fluid.

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT2012121611771N1**
Registration date: **2013-01-10, 1391/10/21**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-01-10, 1391/10/21

Registrant information

Name

Shirin Zahra Farhad

Name of organization / entity

Khorasgan Islamic Azad Dental School (Isfahan)

Country

Iran (Islamic Republic of)

Phone

+98 31 1664 1410

Email address

drsh.farhad@khuisf.ac.ir

Recruitment status

Recruitment complete

Funding source

private

Expected recruitment start date

2010-10-23, 1389/08/01

Expected recruitment end date

2011-10-23, 1390/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of adjunctive low-dose doxycycline and licorice therapy on gingival cervicular fluid matrix metalloproteinase-8 levels in chronic periodontitis

Public title

The effect of doxycycline and licorice therapy on gingival cervicular fluid matrix metalloproteinase-8 levels in chronic periodontitis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: chronic mild to moderate periodontitis.
Exclusion criteria: Patients with any infectious or systemic diseases; no drug usage at all; pregnant, breast feeder patients; patients allergic to antibiotics; no scaling and root planning or periodontal surgeries in the last six months; no usage of herbal or antibiotic drugs during the last six months; Smokers, alcoholics; patients with poor oral hygiene or patients with poor compliance

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 39

Randomization (investigator's opinion)

Randomized

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

Double blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features

because the low dosage (20mg) of Doxycycline was not commercially available, it was ordered to a pharmacist to be prepared in small capsules similar to placebos.

Secondary Ids

empty

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

Islamic Azad Dental School Khorasgan Branch,
(Isfahan), Iran

Street address

Islamic Azad University Khorasgan (Isfahan) Branch,
University Boulevard, Arghavanieh, Eastern Jay
Street, Isfahan, Iran.

City

Isfahan

Postal code**Approval date**

2010-12-11, 1389/09/20

Ethics committee reference number

89092007405

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

Chronic Periodontitis

ICD-10 code

K05.3

ICD-10 code description

Chronic periodontitis

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

MMP-8 concentrate in GCF

Timepoint

0 and 6 weeks

Method of measurement

Nanogram per milliliter by means of ELISA reader

Secondary outcomes

empty

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

Intervention: One 20mg Capsule of Doxycycline per day for six weeks

Category

Treatment - Drugs

2**Description**

Intervention: One 400mg Tablet of Licorice per day for six weeks

Category

Treatment - Drugs

3**Description**

Control: One Placebo Capsule per day for six weeks

Category

Placebo

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

Khorasgan Islamic Azad Dental School (Isfahan)

Full name of responsible person

Shirin Zahra Farhad

Street address

Islamic Azad University Khorasgan (Isfahan) Branch,
University Boulevard, Arghavanieh, Eastern Jay
Street, Isfahan, Iran.

City
Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Islamic Azad University Khorasgan Branch (Isfahan)

Full name of responsible person
Shirin Zahra Farhad

Street address
Periodontics Department of Islamic Azad University
Khorasgan (Isfahan) Branch, University Boulevard,
Arghavanieh, Eastern Jay Street, Isfahan, Iran.

City
Isfahan

Grant name

Grant code / Reference number

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

Title of funding source
Islamic Azad University Khorasgan Branch (Isfahan)

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
Islamic Azad Dental School Khorasgan Branch,
(Isfahan), Iran

Full name of responsible person
Shirin Zahra Farhad

Position
Assistant Professor of Periodontics

Other areas of specialty/work

Street address
Periodontic Department of Islamic Azad University
Khorasgan (Isfahan) Branch, University Boulevard,
Arghavanieh, Eastern Jay Street, Isfahan, Iran.

City
Isfahan

Postal code
Phone
+98 31 1664 1410

Fax
Email
drsh.farhad@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
Islamic Azad Dental School Khorasgan Branch,
(Isfahan), Iran

Full name of responsible person
Shirin Zahra Farhad

Position
Assistant Professor of Periodontics

Other areas of specialty/work

Street address
Periodontic Department of Islamic Azad University
Khorasgan (Isfahan) Branch, University Boulevard,
Arghavanieh, Eastern Jay Street, Isfahan, Iran.

City
Isfahan

Postal code
Phone
+98 31 1664 1410

Fax
Email
drsh.farhad@yahoo.com

Web page address

Person responsible for updating data

Contact

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