

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Jun 2026

The effect of phase I periodontal treatment on the concentrations of IL-22 and S100A12 in patients with chronic periodontitis

Protocol summary

Summary

(1) Objectives Periodontitis is a destructive and progressive inflammatory condition of tooth-supporting tissues, the pathogenesis of which is attributed to several risk factors, including bacteria, the host immune responses and genetics . The aim of the present study was to evaluate the level and correlation of human S100A12 and IL22 in gingival crevicular fluid(GCF)in patients with chronic periodontitis. (2) Design : interventional (3) Setting and conduct:A total of 22 patients ,will be selected from those referring to the Department of Periodontics, Faculty of Dentistry, Shahed University. After collecting Gingival Crevicular Fluid (GCF) samples from the case group subjects, phase I periodontal treatment will be rendered, which consists of scaling and root planing and oral hygiene control. The subjects are recalled after 4 weeks for collecting samples again. The same areas underwent sampling again to collect GCF samples using the same procedures. The GCF of the patients after and before phase I periodontal treatment , are the case and control groups respectively. (4) Participants including major eligibility criteria The inclusion criteria : presence of at least 20 teeth in the oral cavity; affliction with moderate and severe chronic periodontitis with radiographic evidence of bone loss. The exclusion criteria : patients with cardiovascular diseases and hypertension; use of tobacco; pathologic conditions in the oral cavity; subjects with chronic inflammatory conditions such as rheumatoid arthritis; presence of tumors; pregnancy; use of any medications affecting the periodontium; presence of systemic diseases that affect the course of periodontal disease; having undergone scaling and root planing during the previous 6 months and a history of taking antibiotics and Nonsteroidal anti-inflammatory drug during the previous 3 months. (5) Intervention:phase I periodontal treatment , which consists of scaling and root planing and oral hygiene control (6) Main outcome measures (variables): S100A12 ; IL-22

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016123131687N1**
Registration date: **2017-04-15, 1396/01/26**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-04-15, 1396/01/26

Registrant information

Name

Razieh Nejadi

Name of organization / entity

Shahed university, Dental faculty

Country

Iran (Islamic Republic of)

Phone

+98 21 2654 1610

Email address

r.nejadi@shahed.ac.ir

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2017-03-10, 1395/12/20

Expected recruitment end date

2017-04-09, 1396/01/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of phase I periodontal treatment on the concentrations of IL-22 and S100A12 in patients with chronic periodontitis

Public title

The effect of scaling on the concentrations of inflammatory factors in patients with gum diseases

Purpose

Basic science

Inclusion/Exclusion criteria

The inclusion criteria : presence of at least 20 teeth in the oral cavity; affliction with moderate and severe chronic periodontitis with radiographic evidence of bone loss
The exclusion criteria : patients with cardiovascular diseases and hypertension; use of tobacco; pathologic conditions in the oral cavity; subjects with chronic inflammatory conditions such as rheumatoid arthritis; presence of tumors; pregnancy; use of any medications affecting the periodontium; presence of systemic diseases that affect the course of periodontal disease; having undergone scaling and root planing during the previous 6 months; history of taking antibiotics and Nonsteroidal anti-inflammatory drug during the previous 3 months

Age

No age limit

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: 22

Randomization (investigator's opinion)

N/A

Randomization description**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**

Ethics committee of Shahed university

Street address

Dental faculty of Shahed university, Italia street , between Qods and Vesal street, Tehran

City

Tehran

Postal code**Approval date**

2017-02-28, 1395/12/10

Ethics committee reference number

IR.Shahed.REC.1395.219

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**

S100A12

Timepoint

base line, 4 weeks

Method of measurement

ELISA TEST

2**Description**

IL22

Timepoint

base line, 4 weeks

Method of measurement

ELISA TEST

Secondary outcomes**1****Description**

clinical attachment level

Timepoint

base line, 4 weeks

Method of measurement

by williams probe(clinical)

2**Description**

clinical probing depth

Timepoint

base line , 4 weeks

Method of measurement

by williams probe (clinical)

Intervention groups

1

Description

Intervention :scaling & root planning and oral hygiene control ; The GCF of the patients after and before phase I periodontal treatment , are the case and control groups respectively.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Dental faculty of Shahed university

Full name of responsible person

Razieh Nejadi

Street address

Dental faculty of Shahed university,Italia street, between Vesal and Qods, Tehran

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research,Dental faculty of Shahed university

Full name of responsible person

Dr.Farid Abbasi

Street address

Dental faculty of Shahed university,Italia street, between Vesal and Qods, Tehran

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Tehran

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,Dental faculty of Shahed university

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 faculty of Shahed university

Full name of responsible person

Razieh Nejadi

Position

Resident of Periodontics

Other areas of specialty/work

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Person responsible for scientific inquiries

Contact

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Full name of responsible person

Razieh Nejadi

Position

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Web page address

Person responsible for updating data

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Full name of responsible person

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Position

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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