Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Comparison of the effects of one-stage full-mouth disinfection and quadrant-wise scaling and root planing on serum levels of IL-17 and IL-1β and clinical parameters following treatment of moderate-to-severe chronic periodontitis

Protocol summary

Summary

Aim:The aim of the present study was to compare the effects of one-stage full-mouth disinfection technique with the quadrant-wise scaling and root planing on serum levels of interleukin 1-beta and interleukin17 in patients with moderate-to-severe chronic periodontitis. Inclusion and exclusion criteria: in patients with moderate-to-severe chronic periodontitis and no systemic disease. Study population ,sample size and primery outcome :Twenty patients with chronic periodontitis were randomly, and based on inclusion criteria in each group, were selected. In order to evaluate periodontal status, the clinical parameters of bleeding on probing,clinical attachment level ,probing depth ,and modified gingival index were measured and recorded before treatment and at 2- and 4-month intervals after treatment. Immunologic parameters of the study,interleukin 1-beta and interleukin17 serum levels, were determined by special laboratory kits at the same intervals.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201107267128N1**
Registration date: **2012-02-18, 1390/11/29**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2012-02-18, 1390/11/29

Registrant information

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Recruitment status

Recruitment complete

Funding source

Tabriz university of medical science

Expected recruitment start date

2010-04-04, 1389/01/15

Expected recruitment end date

2011-04-04, 1390/01/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effects of one-stage full-mouth disinfection and quadrant-wise scaling and root planing on serum levels of IL-17 and IL-1β and clinical parameters following treatment of moderate-to-severe chronic periodontitis

Public title

Comparison of the effects of one-stage and quadrant-wise scaling and root planing on serum levels of serologic indices and clinical parameters in patients with periodontal disease

Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria : A total of 20 patients, with an age range of 25-70 years, suffering from moderate-to-severe chronic periodontitis were randomly selected. The subjects had at least 12 teeth (irrespective of third molars and teeth with orthodontic appliances, bridgeworks, crowns and implants), with the 30% of the teeth with clinical attachment loss of ≥3 mm and radiographic evidence of bone loss in each group, as specified by the inclusion criteria. The exclusion criteria included systemic conditions, conditions which delay would healing, a history of radiotherapy or immune-suppressive treatment modalities, pregnancy or breast-feeling, use of systemic antibiotics during the two previous months, a history of continuous consumption of NSATDs and a history of scaling and root planing during the previous year
Age
From **25 years** old to **70 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **40**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Double blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of tabriz university of medical science
Street address
Tabriz university of medical science, Golgasht street, Daneshgah street, Tabriz, Iran
City
Tabriz
Postal code
Approval date
2011-07-12, 1390/04/21
Ethics committee reference number
918

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
Serum levels of IL-17 and IL-1β
Timepoint
Base line,1month,4month
Method of measurement
ELIZA kit

Secondary outcomes

1

Description
Clinical parameters of periodontium
Timepoint
Base line,1 month, 4 month
Method of measurement
Periodontal probing

Intervention groups

1

Description
Intervention:One-stage full-mouth disinfection
Category
Treatment - Other

2

Description
Control:Quadrant-wise scaling and root planing
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Dentistry faculty of tabriz, Periodontics ward
Full name of responsible person
Dr Adileh Shirmohamadi
Street address

Tabriz university of medical science, Golgasht street, Daneshgah street, Tabriz, Iran

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tabriz university of medical science

Full name of responsible person

Naser asl aminabadi

Street address

Dentistry faculty of tabriz-pediatric dentistry ward

City

Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Tabriz university of medical science

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

Tabriz university of medical science

Full name of responsible person

Amir Reza Babaloo

Position

Periodontist/assistant professor

Other areas of specialty/work

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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