Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The clinical comparison of fissure sealant retention using self-etch and etch-rinse systems

Protocol summary

Summary

Fissure sealant therapy is an effective technique to prevent occlusal caries. However, rinsing teeth after etching may cause uncooperative behavior in children. Prompt L-Pop (PLP) does not require separated acid etching and rinsing phase. The objective of this study was to compare the retention of fissure sealant therapy following the preparation with (PLP) and acid etch-bonding techniques. In this randomized clinical trial study, 40 patients aged 7-12 years with a pair of intact first permanent molars in upper or lower archs indicated for sealant therapy, were selected and one teeth was randomly prepared with single bond (sb) technique and the similar teeth was prepared with PLP , followed by sealant therapy. After 6 and 12 months retention of sealents were controlled by explorers and clinical observation.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138811053168N1**
Registration date: **2010-04-18, 1389/01/29**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2010-04-18, 1389/01/29

Registrant information

Name

Leila Erfanparast

Name of organization / entity

Tabriz University of Medical sciences

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Research Vice-Chancellor, Tabriz University of Medical Sciences

Expected recruitment start date

2008-07-31, 1387/05/10

Expected recruitment end date

2009-09-01, 1388/06/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The clinical comparison of fissure sealant retention using self-etch and etch-rinse systems

Public title

The clinical comparison of two methods for sealing fissures of young permanent teeth

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion Criteria 1)7-12 years of age,2)presence of two first upper or lower molars without caries, 3)deep groove that indicate fissure sealant therapy,4)satisfaction of parentes. Exclusion Criteria 1) carious molars, 2)if two molars were not in the same jaw

Age

From **7 years** old to **12 years** old

Gender

Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **80**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Single blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Research vice-chancellor,Tabriz University of Medical Sciences
Street address
Daneshgah Ave. - Golgasht St.-Tabriz University of Medical Sciences
City
Tabriz
Postal code
Approval date
empty
Ethics committee reference number
2054

Health conditions studied

1

Description of health condition studied
clinical evaluation of two fissure sealant therapy methods
ICD-10 code
z01.2
ICD-10 code description
dental examination

Primary outcomes

1

Description
The retention of sealants
Timepoint
6 and 12 months
Method of measurement
exploration and observation

Secondary outcomes

1

Description
The working time
Timepoint
6 and 12 months
Method of measurement
exploration and observation

Intervention groups

1

Description
fissure sealant therapy with: PLP
Category
Prevention

2

Description
fissure sealant therapy with: acid etch and bonding
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Tabriz Faculty of Dentistry-Department of Pediatric Dentistry
Full name of responsible person
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Daneshgah Ave- Golgasht St.-Tabriz Univdrsity of Medical Sciences-Faculty of Dentistry-Department of Pediatric Dentistry
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Reasearch Vice-Chancellor- Tabriz 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

Faculty of Dentistry

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Asistant Proffessor

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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