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Comparing different treatments to improve recovery after lower third molar surgery

Submission date 18/06/2026	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [X] Record updated in last year
Registration date 19/06/2026	**Overall study status** Completed	
Last Edited 19/06/2026	**Condition category** Oral Health	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Public, Scientific, Principal investigator

Contact name
Dr Cevahir Cengiz

ORCID ID
https://orcid.org/0000-0001-9839-0470

Contact details
Demirkapı mahallesi Bağcılar
Istanbul
Türkiye
34000
+905425512039
cevahircengiz@hotmail.com

Additional identifiers

Study information

Scientific Title
Evaluation of the effects of kinesio taping, placebo taping and cryotherapy on postoperative complications and social appearance anxiety after mandibular third molar surgery: a randomized controlled study

Study objectives
The aim of this randomized, placebo-controlled clinical trial was to evaluate and compare the effectiveness of kinesio taping, placebo taping, cryotherapy, and standard postoperative care in reducing postoperative complications after impacted mandibular third molar surgery. The primary outcomes were pain intensity, analgesic consumption, facial swelling, and mouth opening. Secondary outcomes included social appearance anxiety and patient satisfaction. The study also aimed to determine whether kinesio taping provides additional benefits beyond placebo effects and conventional cryotherapy.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 11/10/2023, University of Health Sciences Clinical Research Ethics Committee (Emrah Mahallesi, Etlik, Keciören, Ankara, 06018, Türkiye; +90 312 567 15 00; gulhaneetikkurul@gmail.com), ref: 2023/213

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Placebo

Assignment
Parallel

Purpose
Treatment

Study type(s)

Health condition(s) or problem(s) studied
Postoperative complications after impacted mandibular third molar surgery.

Interventions
Participants are randomly assigned to one of four parallel groups using computer-generated randomization. All participants undergo surgical extraction of an impacted mandibular third molar and receive standard postoperative care, including antibiotics, analgesics, and antiseptic mouthwash.
Group 1 receives kinesio taping immediately after surgery. Kinesio tape is applied from the supraclavicular region towards the surgical site and remains in place for 5 days.
Group 2 receives placebo taping immediately after surgery. A non-elastic fixation tape is applied using the same pattern as the kinesio tape and remains in place for 5 days.
Group 3 receives cryotherapy. Participants are instructed to apply ice packs to the surgical area for 20 minutes on and 20 minutes off during the first 24 postoperative hours while awake.

Group 4 serves as the control group and receives standard postoperative care only, without additional physical therapy intervention.
Pain, analgesic consumption, swelling, mouth opening, and social appearance anxiety are assessed preoperatively and on postoperative days 2, 4, and 7. Patient satisfaction is assessed on postoperative day 7.

Intervention Type
Procedure/Surgery

Primary outcome(s)
1. Postoperative pain measured using a Numerical Rating Scale (0–10) at postoperative days 2, 4 and 7

2. Analgesic usage measured using patient-reported analgesic intake recorded on the home evaluation form at postoperative days 2, 4 and 7

3. Facial swelling measured using five linear facial measurements (Tragus–Commissure, Tragus–Pogonion, Tragus–Lateral Canthus, Lateral Canthus–Angulus, and Angulus–Nasion) at baseline and postoperative days 2, 4 and 7

4. Mouth opening measured using the interincisal distance measurement using a ruler at Baseline and postoperative days 2, 4 and 7

Key secondary outcome(s)
1. Social appearance anxiety measured using the Social Appearance Anxiety Scale (SAAS) at baseline and postoperative days 2, 4 and 7

2. Patient satisfaction measured using a Numerical Rating Scale (0–10) at postoperative day 7

Completion date
07/04/2024

Eligibility

Key inclusion criteria
1. Adults aged 18–35 years
2. Presence of an impacted mandibular third molar classified as Pell and Gregory Class II, Position B
3. Scheduled for surgical extraction of the impacted mandibular third molar
4. Medically healthy individuals (ASA I)
5. Willingness to participate in the study and provision of written informed consent

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
35 Years

Sex
All

Total final enrolment
128

Key exclusion criteria
1. Smokers
2. Impacted mandibular third molars not classified as Pell and Gregory Class II, Position B
3. History of cold intolerance
4. Raynaud’s disease
5. History of cold-induced urticaria
6. Presence of cold-related disorders such as cryoglobulinemia
7. Regular use of analgesics or anti-inflammatory medications
8. Age below 18 years or above 35 years
9. Cases in which bone removal (osteotomy) was not required during surgery
10. Refusal or inability to provide written informed consent

Date of first enrolment
01/11/2023

Date of final enrolment
31/03/2024

Locations

Countries of recruitment
Türkiye

Sponsor information

Organisation
Sağlık Bilimleri Üniversitesi

ROR
https://ror.org/03k7bde87

Funder(s)

Funder type

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available