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Application of kinesio tape using web strip technique after wisdom tooth extraction

Submission date
09/06/2024

Recruitment status
No longer recruiting

Registration date
12/06/2024

Overall study status
Completed

Last Edited
31/07/2025

Condition category
Oral Health

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol
Background and study aims
There are various methods to improve the patient's quality of life and alleviate complications after surgical extraction of the lower third molars (wisdom teeth). The aim of this study is to evaluate the effectiveness of Kinesio tape using the web strip technique in alleviating complications after surgical extraction of the lower third molar compared to cold packs.

Who can participate?
Patients aged 18-35 years after surgical extraction of the lower third molar

What does the study involve?
Participants underwent surgical extraction of impacted wisdom teeth (two teeth for each patient with a 4-week period between the two surgical extractions). Each surgical extraction takes 20-40 minutes. On one side Kinesio Tape was applied using the web strip technique, while cold packs were applied on the other side.

What are the possible benefits and risks of participating?
The possible benefits are decreased pain, edema (swelling) and trismus (lockjaw), and increased quality of life. There are no risks after the application of Kinesio tape.

Where is the study run from?
Damascus University (Syria)

When is the study starting and how long is it expected to run for?
September 2021 to June 2023

Who is funding the study?
Damascus University (Syria)

Who is the main contact?
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Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Protocol serial number
DN-290424-230

Study information

Scientific Title
Evaluation of the use of kinesio tape in web strip technique efficacy to reduce the sequelae comparing with cryotherapy after impacted third molar extraction: a randomized clinical split-mouth study

Study objectives
Null Hypothesis: There is no difference between the use of Kinesio Tape and cryotherapy on pain after surgery between the groups.
Alternative Hypothesis: There is a difference between the use of Kinesio Tape and cryotherapy on pain after surgery between the groups.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 27/09/2021, Scientific Research and Postgraduate Studies Council (Baramkeh, Damascus, 34567, Syria; +963 (0)1133923192; ap.srd@damascusuniversity.edu.sy), ref: DN-290424-230

Primary study design
Interventional

Study design
Randomized controlled clinical study using the split-mouth technique

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Complications after surgical extraction of lower third molars

Interventions
The intervention was a surgical extraction of impacted wisdom teeth (two teeth for each patient with a 4-week period between the two surgical extractions). Each surgical extraction takes 20-40 minutes. On one side Kinesio tape was applied using the web strip technique, while cryotherapy (cold packs) was applied on the other side.

Intervention Type
Procedure/Surgery

Primary outcome(s)
1. Pain measured using a visual analogue scale (VAS) on the 1st, 2nd, 3rd, 4th and 5th days after the surgery
2. Patient's maximum possible mouth opening measured using a millimeter measuring tool (Piacolis) before surgery and on the third and fifth days after surgery to evaluate trismus
3. Facial swelling evaluated using a millimeter measuring tool by measuring the lengths of four lines between four fixed anatomical points on the face preoperatively and on the third and fifth postoperative days

Key secondary outcome(s)
1. Severity of postoperative symptoms measured using a questionnaire based on the Post-operative Symptom Severity Scale (PoSSe) on the 7th day after surgery
2. Pain evaluated by recording the number of consumed analgesic pills daily on the 1st, 2nd, 3rd, 4th and 5th days after the surgery

Completion date
01/06/2023

Eligibility

Key inclusion criteria
1. Aged 18-35 years
2. The duration of the surgical extraction of the lower third molar was 20-40 minutes
3. Good oral and systematic hygiene
4. No temporomandibular joint disorders
5. No symptoms of pericoronitis or severe pain before surgery

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
35 Years

Sex
All

Total final enrolment
25

Key exclusion criteria
1. Patients with pericoronitis and symptoms of acute pain before surgery
2. Patients who are allergic to the adhesive tape material and the medications used in the research
3. Patients who have thick hair where the material is applied and do not wish to shave it
4. The duration of the surgical procedure is less than 20 or more than 40 minutes
5. Smoking patients
6. Uncontrolled systemic diseases
7. Pregnant and lactating women
8. Poor oral hygiene
9. Patients with temporomandibular joint disorders

Date of first enrolment
01/02/2022

Date of final enrolment
01/01/2023

Locations

Countries of recruitment
Syria

Study participating centre
Damascus University
Faculty of Dentistry
Damascsus
Syria
56789

Sponsor information

Organisation

Damascus University

ROR
https://ror.org/03m098d13

Funder(s)

Funder type
University/education

Funder Name
Damascus University

Alternative Name(s)
University of Damascus, , DU

Funding Body Type
Government organisation

Funding Body Subtype
Universities (academic only)

Location
Syria

Results and Publications

Individual participant data (IPD) sharing plan
The data-sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary
Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		09/08/2024	31/07/2025	Yes	No
Results article	pain and analgesic consumption	12/02/2025	31/07/2025	Yes	No