Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Evaluating the effectiveness of vitamin C intake in patients diagnosed with rotator cuff tears undergoing arthroscopic treatment

Protocol summary

Study aim

Determinig the effectiveness of vitamin C intake in patients diagnosed with rotator cuff tears undergoing arthroscopic treatment

Design

This is a prospective, monocentric randomized study approved by the Kerman University of Medical Science Ethical Committee. The randomization process was carried out by year of birth: patients born in an even number year received postoperative VC supplementation at a dose of 500 mg per day orally for 45 days (VC+ group) and patients born in an odd number year received no supplementation (VC−group). .

Settings and conduct

We included all patients who underwent arthroscopic a primary rotator cuff repair. The patients are then, divided into two groups. Preoperatively, then at 45 days, 3 months and 6 months, active mobility is measured using a goniometer. Also, the standardized shoulder evaluation form of american shoulder and elbow surgeons and the visual analogue scores preoperation and 6 months after the operation were determined. the participant and the evaluator are blinded. In this research, placebo is used and then vitamin C and the placebo are divided into two groups, A and B.

Participants/Inclusion and exclusion criteria

All paitents undergoing arthroscopic treatment due to rotator cuff tendon tear in year 1402- 1403 will enter the study The exclusion criteria were a retraction of at least one tendon superior or equal to grade 3, fatty degeneration of at least one muscle superior or equal to grade 3, an anatomically non-repairable tear, and an isolated injury of the subscapular (Ssc) tendon. Patients without a clinical and ultrasound evaluation at a minimum follow-up of 6 months were excluded.

Intervention groups

Vitamin C + group in which they recieve vitamin C supplement 500mg per day, oral, for 45 days

Main outcome variables

Pain; Rotator Cuff tendon range of motion

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20231021059783N1**
Registration date: **2023-11-19, 1402/08/28**
Registration timing: **prospective**

Last update: **2023-11-19, 1402/08/28**
Update count: **0**

Registration date

2023-11-19, 1402/08/28

Registrant information

Name

Ghazal Ejlali

Name of organization / entity

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-12-25, 1402/10/04

Expected recruitment end date

2024-04-23, 1403/02/04

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
Evaluating the effectiveness of vitamin C intake in patients diagnosed with rotator cuff tears undergoing arthroscopic treatment

Public title
Evaluating the effectiveness of vitamin C intake in patients diagnosed with rotator cuff tears undergoing arthroscopic treatment

Purpose
Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
All paitents undergoing arthroscopic treatment due to rotator cuff tendon tear in year 1402- 1403 after having signed the consent form will enter the study

Exclusion criteria:
A retraction of at least one tendon superior or equal to grade 3 Fatty degeneration of at least one muscle superior or equal to grade 3 An anatomically non-repairable tear An isolated injury of the subscapular tendon

Age
No age limit

Gender
Both

Phase
3

Groups that have been masked

- Participant
- Outcome assessor

Sample size
Target sample size: **131**

Randomization (investigator's opinion)
Not randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description
In this research, the participant and the evaluator are blinded. In this research, placebo is used. We use a similar product in terms of color, size, flavor, scent and other characteristics similar to vitamin C. Vitamin C and the placebo are divided into two groups, A and B, and neither the participant nor the evaluator knows which group is the placebo and which is vitamin C.

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Kerman University of Medical Sciences

Street address
Pardis of Medical University of Kerman, Haft Bagh Alavi Blvd. Kerman, Kerman

City
Kerman

Province
Kerman

Postal code
7616913555

Approval date
2023-10-15, 1402/07/23

Ethics committee reference number
IR.KMU.AH.REC.1402.122

Health conditions studied

1

Description of health condition studied
Rotator Cuff tear

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
Pain

Timepoint
Pre operation, 6 months post-operation

Method of measurement
Yes-No questions based on American Shoulder and Elbow Surgeons questionare and Visual Analogue Scale

2

Description
Rotator Cuff tendon range of motion

Timepoint
Pre operation, 45 days post-operation, 3 months post-operation, 6 months post-operation

Method of measurement
Based on American Shoulder and Elbow Surgeons questionare and Goniometry

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Vitamin C + group in which they

recieve vitamin c supplement 500mg per day, oral, for 45 days

Category

Treatment - Drugs

2

Description

Control group: Vitamin C - group in which they wont recieve any kind of supplement

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shafa Hospital

Full name of responsible person

Ghazal Ejlali

Street address

Shafa Hospital, Kowsar Blvd. Kerman, Iran

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2

Recruitment center

Name of recruitment center

Shahid Bahonar Hospital

Full name of responsible person

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3

Recruitment center

Name of recruitment center

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Full name of responsible person

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Kerman University of Medical Sciences

Full name of responsible person

Abedin Iran Pour

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Grant name

Grant code / Reference number

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

No

Title of funding source

Personal

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Persons

Person responsible for general inquiries

Contact

Name of organization / entity

Kerman University of Medical Sciences

Full name of responsible person
Ghazal Ejlali

Position
Medical Student

Latest degree
A Level or less

Other areas of specialty/work
General Practitioner

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Person responsible for scientific inquiries

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available