

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Effect of gum chewing on bowel motility after abdominal surgery

Protocol summary

Summary

Objective: Postoperative ileus is common after abdominal resection and causes gas storage, distention, nausea, vomiting and even pain. Gum chewing is a type of sham feeding that may reduce the duration of postoperative ileus. This study determines the effect of gum chewing on bowel motility after abdominal surgery. **Methods and Materials:** 70 patients undergoing abdominal resection were randomized into A and B groups (each 35 patients). Group A chewed sugarless gum for 20 minutes in 4, 10 and 18 hours after discharge from operative room. There was no intervention in group B. Demographics, intraoperative, and postoperative care data were equivalent between the two groups. The first passage of flatus, defecation, bowel sound and the statistics of cop muse ring were measured for any patient every two hours and compared between two groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138802091860N1**

Registration date: **2011-01-09, 1389/10/19**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-01-09, 1389/10/19

Registrant information

Name

Ali akbar Abdollahi

Name of organization / entity

Golestan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 17 1442 6900

Email address

abdollahi@goums.ac.ir

Recruitment status

Recruitment complete

Funding source

Gorgan University of Medical Sciences

Expected recruitment start date

2008-08-22, 1387/06/01

Expected recruitment end date

2009-08-23, 1388/06/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of gum chewing on bowel motility after abdominal surgery

Public title

Effect of gum chewing on bowel motility after abdominal surgery

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: upper 15 years of age, appendectomy and Cholecystectomy. Exclusion criteria: diabetic mellitus, electrolyte disorder, hypothyroidism, hypoparathyroidism, nerve muscular disorder and addiction.

Age

From **15 years** old to **75 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 70

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

Gorgan University of Medical Sciences

Street address

Gorgan University of Medical Sciences

City

Gorgan

Postal code

491165-568

Approval date

2008-03-10, 1386/12/20

Ethics committee reference number

7559/35/پ/گ

Health conditions studied

1

Description of health condition studied

Abdominal Surgery

ICD-10 code

K82

ICD-10 code description

Other diseases of gallbladder

2

Description of health condition studied

Abdominal Surgery

ICD-10 code

K35

ICD-10 code description

Acute appendicitis

Primary outcomes

1

Description

The first passage of flatus

Timepoint

Each Two hours after the surgery untill the first passage of a flatus

Method of measurement

Question from the patient

2

Description

The first bowel sound

Timepoint

Eech Two hours after the surgery untill hearing the first sound

Method of measurement

stethoscope

3

Description

The first defecation

Timepoint

Each Two hours after the surgery untill the first defecation

Method of measurement

Question from the patient

Secondary outcomes

empty

Intervention groups

1

Description

Group A chewed sugarless gum for 20 minutes in 4, 10 and 18 hours after discharge from operative room

Category

Rehabilitation

2

Description

Group B with no intervention

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

5 Azar education and treatment center

Full name of responsible person

Street address

City

Gorgan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Department of Research & Technology, Gorgan
University of Medical Sciences

Full name of responsible person

Dr Arabi

Street address

Gorgan University of Medical Sciences

City

Gorgan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Department of Research & Technology, Gorgan
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

Gorgan University of Medical Sciences

Full name of responsible person

Ali Akbar Abdollahi

Position

Academic instructor, School of Nursing and Midwifery

Other areas of specialty/work

Street address

4th floor, Safa apartment, Secand Dokaniat, Dokaniat
complex

City

Gorgan

Postal code

Phone

+98 17 1442 5165

Fax

+98 17 1442 5171

Email

abdollahy64@yahoo.com , abdollahy64@gmail.com ,
abdollahi@goums.ac.ir

Web page address

Person responsible for scientific

inquiries

Contact

Name of organization / entity

Gorgan University of Medical Sciences

Full name of responsible person

Ali Akbar Abdollahi

Position

Academic instructor, School of Nursing and Midwifery

Other areas of specialty/work

Street address

Journal Office, Gorgan University of Medical Sciences

City

Gorgan

Postal code

4917953879

Phone

+98 17 1554 2398

Fax

+98 17 1442 5171

Email

abdollahy64@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Gorgan University of Medical Sciences

Full name of responsible person

Ali Akbar Abdollahi

Position

Academic instructor, School of Nursing and Midwifery

Other areas of specialty/work

Street address

Journal Office, Gorgan University of Medical Sciences

City

Gorgan

Postal code

4917953879

Phone

+98 17 1554 2398

Fax

+98 17 1442 5171

Email

abdollahy64@yahoo.com

Web page address

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

