Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 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
پ/گ/7559/35

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

Data Dictionary	*empty*