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The effect of postsurgery execise on recovery from colorectal cancer surgery

Submission date
17/02/2012

Recruitment status
No longer recruiting

Registration date
28/02/2012

Overall study status
Completed

Last Edited
27/06/2013

Condition category
Cancer

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
A transient postoperative ileus, a temporary disturbance in gastric and bowel motility following surgery, is recognized as an expected outcome of any major abdominal surgery including colon and rectum. Delayed recovery from the surgery would also delay the initiation of subsequent therapies. Therefore, it is important to find modality which may reduce postoperative ileus and enhance recovery from the surgery as early as possible. In recent years, the Enhance Recovery after Surgery (ERAS) aimed at improving before and after surgery care and decreasing postoperative complication, has been used extensively. Techniques include optimal pain control by epidural (anaesthetic drug injected in spine) and local anaesthesia, minimally invasive techniques and aggressive post-operative rehabilitation, which include early feeding, removal of tube, early ambulation (walking). Although studies examined the safety, efficacy and effectiveness of this protocol on surgery outcomes including the length of hospital study, these studies did not measure the effects of early ambulation separately. Therefore, the purposes of the current study are 1) to investigate the effects of post-surgery exercise on surgery outcomes including the length of hospital stay, time to flatus (passing wind) and time to first normal diet, 2) to investigate the association between surgery outcomes change in body measurements and fitness levels during recovery from surgery.

Who can participate?
Patients who are admitted to Severance hospital for stage 1-3 colon cancer can participate in the study. To take part you need to be aged 18 years or older, have a good understanding of Korean language and is willing to participate in the study.

What does the study involve?
Patients will be randomly allocated to control group (usual care) or exercise group. In the exercise group patients will undergo 1-15 minute exercise under the guidance of exercise therapist. Fitness will be measured before the surgery and one day before the hospital release.

What are the possible benefits and risks of participating?
Participants randomized to the exercise group will receive personalized exercise program while

they are staying at the hospital after the surgery.
All exercise is symptom limited and therefore if the patient feels pain or do not want to exercise, then he/she does not have to exercise. There are no known risks to participants.

Where is the study run from?
The study takes place at Severance Hospital located at Shinchon, Seoul, Korea

When is the study starting and how long is it expected to run for?
Patients were enrolled in the study between May 2011 to Feb 2012

Who is funding the study?
Ministry of Health and Welfare in Korean Goverment

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
Postoperative exercise reduced the length of hospital stay among stage 1 to 3 colon cancer patients: Randomized controlled trial of efficacy and safety of exercise protocol

Study objectives
Postoperative exercise will reduce the time of hospital stay, time to flatus and time to the first normal diet

Ethics approval required
Old ethics approval format

Ethics approval(s)
Institutional Ethics Review Board at Yonsei University College of Medicine, ref: 2004-2010-0147

Study design
Randomized controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Stage I to III colon cancer

Interventions
Randomized into either an exercise or usual care group via minimization method.

Exercise group - The patient will undergo 1-15 minute exercise under the guidance of exercise therapist.

The other group will undergo usual care during their recovery from surgery.

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
1. The length of hospital stay
2. Time to flatus
3. Time to the first normal diet

Key secondary outcome(s))
1. Fitness
2. Body composition

Measured before the surgery and one day before the hospital release

Completion date
01/03/2012

Eligibility

Key inclusion criteria

1. Stage 1-3 colon cancer
2. Aged between 18-70
3. Able to read and understand Korean language

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Upper age limit
70 years

Sex
All

Key exclusion criteria
1. Patient with recurrent cancer
2. Patient with body mass index (BMI) less than 18 kg/m2 or over BMI 30kg/m2

Date of first enrolment
01/03/2011

Date of final enrolment
01/03/2012

Locations

Countries of recruitment
Korea, South

Study participating centre
134 Shinchon-Dong
Seoul
Korea, South
120-749

Sponsor information

Organisation
Yonsei University College of Medicine (Korea, South)

ROR
https://ror.org/01wjejq96

Funder(s)

Funder type
Government

Funder Name
National Research Foundation of Korea (NRF) (Korea, South) (No.2011-0004892)

Alternative Name(s)
, National Research Foundation (South Korea), NRF

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
Korea, South

Funder Name
National R & D program for Cancer Control, Ministry of Health and Welfare, Republic of Korea (1120230)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes