

Diverting ileostomy after low anterior resection

Submission date 04/06/2015	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 12/06/2015	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 04/08/2016	Condition category Cancer	☐ Individual participant data

Plain English summary of protocol

Background and study aims

At the moment it's unclear if patients suffering from rectal cancer who undergo surgical treatment (rectal resection) have a potential benefit of a temporary protective stoma (ileostomy) in terms of lower postoperative complications, especially at the colorectal anastomosis. Postoperative complications may lead to significant morbidity and mortality. The aim of our study is to investigate if a protective stoma may prevent severe postoperative complications.

Who can participate?

Adult patients of both sexes (age 19-85 years) suffering from rectal cancer.

What does the study involve?

All patients undergo surgical treatment (rectal resection). Before surgery a randomization of all patients is performed and two groups are created: in one group patients receive a temporary protective stoma (ileostomy) additionally to rectal surgery, in the other group patients are treated without this protective stoma. After the operation and hospital dismissal, all patients are invited to a planned study visit 10 weeks after the operation. Patients who are treated with temporary stoma get their stoma revised 6 to 8 weeks after the primary operation. In all patients the postoperative course is documented and gets compared in a statistical analysis.

What are the possible benefits and risks of participating?

At the moment it's unclear whether patients who undergo rectal resection without protective stoma have a higher risk of postoperative complication compared to patients treated with temporary stoma. A possible benefit for lower postoperative complications may be the performance of a protective stoma.

Where is the study run from?

Brothers of Mercy Hospital St. Veit/Glan (Austria)

When is the study starting and how long is it expected to run for?

January 2004 to September 2014

Who is funding the study?

Brothers of Mercy Hospital St. Veit/Glan (Austria)

Who is the main contact?
Prof. Jörg Tschmelitsch

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
Diverting ileostomy versus no diversion after low anterior resection for rectal cancer: a prospective randomised multicenter trial

Study objectives
To determine whether a protective diverting ileostomy improves short-term outcome in patients with rectal resection and colonic J-pouch reconstruction for low anastomoses.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Ethik-kommission des landes kärnten,14/11/2003, ref: A34/03

Study design
Two-arm randomised open-label multicentre study

Primary study design
Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Histologically verified and operable rectal cancer

Interventions

Patients were stratified by gender, anastomotic height and preoperative radio-chemotherapy to be operated either by rectal resection and colo-anal/rectal anastomosis with a diverting ileostomy (group A) or rectal resection and colo-anal/rectal anastomosis without protective ileostomy (group B). Patients in both groups with low anastomoses (< 8 cm) were planned to receive a colonic J-pouch reconstruction.

Intervention Type

Procedure/Surgery

Primary outcome(s)

The primary efficacy endpoint of the present study was the overall anastomotic leakage rate as defined by one of the following:

1. Radiologic leak: radiologic evidence of a leak in a Gastrografen enema and/or CT scan without clinical signs of anastomotic leakage
2. Clinical leak: radiologic evidence of a leak in a Gastrografen enema and/or CT scan and/or sigmoidoscopy with one or more of the following clinical signs: elevated temperature (> 38°C), leucocytosis, peritonitis, putrid or faecal discharge over the drainage or fistulas (recto-vaginal)

Key secondary outcome(s)

1. Surgical complications related to primary surgery, to the stoma before closure and to secondary surgery for stoma closure
2. Postoperative mortality defined as death on account of any cause during the hospital stay due to the primary operation or stoma closure
3. The length of hospital stay in days for the primary operation and stoma closure

Completion date

01/09/2014

Eligibility**Key inclusion criteria**

1. Patients aged 19 to 85 years with biopsy-proven and operable rectal cancer
2. Patients with or without preoperative radio-chemotherapy
3. Patients with a distal border of the tumour within 16 cm from the anal verge as demonstrated by rigid rectoscopy
4. Patients with a WHO performance status ≤ 2

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Patients with previous rectal surgery
2. Emergency cases
3. Planned laparoscopic resections
4. Patients suffering from metastatic disease or synchronous colon cancer

Date of first enrolment

01/01/2004

Date of final enrolment

01/09/2014

Locations**Countries of recruitment**

Austria

Study participating centre

Department of Surgery, Hospital of the Brothers of Mercy

Sankt Veit an der Glan

Austria

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Study participating centre

Department of Surgery, Hospital of the Brothers of Mercy

Graz

Austria

-

Study participating centre

Department of Surgery, University of Salzburg

Salzburg

Austria

-

Sponsor information

Organisation

Brothers of Mercy Hospital

ROR

<https://ror.org/01fxzb657>

Funder(s)**Funder type**

Hospital/treatment centre

Funder Name

Brothers of Mercy Hospital (Austria)

Results and Publications**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/04/2016		Yes	No