ISRCTN17976930 https://doi.org/10.1186/ISRCTN17976930

Implementation of a food service after surgery at the post anaesthesia care unit

Submission date
14/12/2021

Recruitment status
No longer recruiting

Registration date
17/12/2021

Overall study status
Completed

Last Edited
03/10/2022

Condition category
Other

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[X] Results
[ ] Individual participant data

Plain English summary of protocol

Background and study aims
An essential element of postoperative care is postoperative nutrition. Although the benefit of adequate postoperative nutrition is proven, historical concerns persist regarding postoperative complications. These concerns result in postoperative restriction of nutritional intake, thereby increasing perioperative fasting times and influencing recovery. Postoperative intake of nutrition may be started, in most patients, as soon as the patient is awake and alert.
The aim of our study was to introduce a postoperative food service to reduce postoperative fasting time at the Postoperative Anaesthesia Care Unit (PACU), with attention for nutritional tolerance.

Who can participate?
All postoperative patients older than 18 with a planned overnight stay at the PACU and without a nutritional intake restriction postoperative, could participate in this study.

What does the study involve?
We included patients before and after the implementation of a food service at the PACU. Patients were asked to fill in a survey in the evening after surgery (at approximately 8 p.m.), and a second one in the morning of the first postoperative day (at approximately 8 a.m.). The survey consisted questions about the first nutritional intake after surgery (time point), about nutritional tolerance (nausea, vomiting, flatus), and patient's well-being (thirst, hunger, satisfaction).

What are the possible benefits and risks of participating?
The benefit for the patients is the possibility of direct intake after surgery which might have a positive effect in postoperative recovery. A potential risk is that the nutritional intake can lead to nausea and vomiting.

Where is the study run from?
Amsterdam UMC, location AMC in Amsterdam, the Netherlands at the PACU of the Anaesthesiology department

When is the study starting and how long is it expected to run for?
May 2015 to February 2017

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Dr Mireille van Stijn, m.f.vanstijn@amsterdamumc.nl

Contact information

Type(s)
Scientific

Contact name
Dr Mireille van Stijn

ORCID ID
https://orcid.org/0000-0002-4853-0284

Contact details
Meibergdreef 9
Amsterdam
Netherlands
1105 AZ
+31 205669111
m.f.vanstijn@amsterdamumc.nl

Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Protocol serial number
W15_164 # 15.0198

Study information

Scientific Title
Postoperative nutrition tolerance and nutritional optimization at the post anaesthesia care unit.

Acronym
NUTRIPACU

Study objectives
By introducing a postoperative food service at the Post Anaesthesia Care Unit (PACU) the postoperative fasting time of patients reduces.

Ethics approval required

Old ethics approval format

Ethics approval(s)
Approved 17/06/2015, Medical Ethics Review Committee of the Academic Medical Center (G4-214, Meibergdreef 9, 1105 AZ Amsterdam, The Netherlands; +31 20 5667389; mecamc@amsterdamumc.nl), ref: W15_164 # 15.0198

Study design
Interventional prospective single-centre before-after study

Primary study design
Interventional

Study type(s)
Other

Health condition(s) or problem(s) studied
Postoperative care at the PACU

Interventions
A food service was developed at the PACU, allowing the reintroduction of nutrition directly after surgery. The implementation of the food service contained; training of the staff, introducing a new postoperative feeding protocol, and optimization of logistics.

A survey was developed containing two sections. The first section consisted of questions regarding the first nutritional intake moment (time point), and the occurrence of postoperative nausea, vomiting, and flatus. The second section consisted of questions regarding thirst, hunger, nausea and overall patient satisfaction, scored through 5-point Likert-scales (0=non/ low till 4=high/ satisfactory).

Each included patient was asked to fill in the survey twice, with nursing staff providing assistance if needed. The first survey was taken in the evening after surgery (at approximately 8 p.m.), and the second in the morning of the first postoperative day (at approximately 8 a.m.). Patients' characteristics, and intra-operative data that are related to postoperative nutrition, were collected from the electronic patient record system.

Identical surveys and data were taken and collected before the implementation of the food service, in a control group (before), and after implementation in an intervention group (after).

Intervention Type
Other

Primary outcome(s)
Postoperative fasting time defined as the time of arrival at the PACU and the first time of postoperative intake or leaving to the surgical ward measured using the patient survey taken in the evening after surgery (at approximately 8 p.m.), and in the morning of the first postoperative day (at approximately 8 a.m.).

Key secondary outcome(s))
1. Nutrition tolerance measured by incidence of vomiting, the nausea score, and the amount of postoperatively administered anti-emetics measured using patient records at a single time point

2. Nutritional optimization measured using nutritional intake on the day of surgery (day 0) at 8 p. m., and on the first postoperative day (day 1) at 8 a.m.
3. Patient outcomes: satisfaction, hunger, thirst, and flatus were surveyed on the day of surgery (day 0) at 8 p.m., and on the first postoperative day (day 1) at 8 a.m.

Completion date
03/02/2017

Eligibility

Key inclusion criteria
All adult patients with a planned overnight stay at the PACU, without anticipated postoperative dietary restrictions

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Total final enrolment
235

Key exclusion criteria
1. Children
2. Alternative nutritional intake route
3. Not able to communicate in Dutch or English
4. Not willing to participate

Date of first enrolment
01/07/2015

Date of final enrolment
02/02/2017

Locations

Countries of recruitment
Netherlands

Study participating centre

Amsterdam UMC, location AMC, Department of Anaesthesiology
Meibergdreef 9
Amsterdam
Netherlands
1105 AZ

Sponsor information

Organisation
Amsterdam UMC Location VUmc

ROR
https://ror.org/00q6h8f30

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon reasonable request from MFM van Stijn, MD PhD (m.f.vanstijn@amsterdamumc.nl).
The individual participant data that underlie the results reported in the article publication will be shared. No other document will be available. The data will be available immediately following article publication. There is no end date for sharing. The data will be made available to investigators whose proposed use of the data has been approved by an independent review committee identified for this purpose. The data will be available to achieve aims in the approved proposal.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		01/10/2022	03/10/2022	Yes	No