Nutritional supplementation and length of stay: a controlled trial of nutritional supplementation in a mixed acute hospital setting

Submission date	Recruitment status No longer recruiting	Prospectively registered		
23/01/2004		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
23/01/2004	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
11/01/2010	Signs and Symptoms			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number RDC00898

Study information

Scientific Title

Study objectives

Loss of weight and low body weight expressed as a function of height are both common among patients admitted to hospital. A pilot study has shown that about 30% of patients admitted as emergencies to the Royal London Hospital have biochemically demonstrable B vitamin deficiencies. Several studies have demonstrated the relationship between length of hospital stay, morbidity, mortality and such indices of nutritional status, but it is unclear to what extent this relationship is causal. The principal purpose of this study is to examine the effect of two strategic nutritional interventions in a large number of non-elective admissions to the Royal London Hospital on length of stay and mortality. We propose a randomized placebo controlled trial of early dietary supplementation with a palatable liquid oral sip feed and/or water soluble vitamins. In this study we have the opportunity further to document nutritional status among such patients and to develop techniques for rapid determination of water soluble vitamin status.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised placebo controlled trial

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

Other symptoms and general pathology

Interventions

- 1. Palatable liquid oral sip feed with vitamin supplements
- 2. Placebo (palatable liquid oral sip feed only)

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

- 1. It is expected that a significant incidence of biochemical water soluble vitamin deficiency will be detected among the patients admitted via accident and emergency and that HPLC of single blood samples, will provide a reliable method for assay, and prove much more rapid and convenient than the established enzymatic methods of routine screening.
- 2. The incident of protein/energy malnutrition detected by anthropometric assessment is expected to approximate 40% in the study group of patients.
- 3. Previous studies suggest that we might expect a reduction of length of stay as a result of feed

supplementation of undernourished inpatients. We might also see reductions in mortality in this group.

4. We might detect a reduction in length of stay and mortality as a result of water soluble vitamin supplementation, either in the study population as a whole, or within subgroups identified in the course of the study.

Key secondary outcome(s))

Not provided at time of registration

Completion date

01/09/1999

Eligibility

Key inclusion criteria

- 1. Patients admitted acutely to general medicine, general surgery and orthopaedics.
- 2. Patients with a body mass index <22 within the above sample, will be randomized to oral sipfeed or placebo feed, independent of whether they are receiving vitamin supplements.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

- 1. Planned admission to medical or orthopaedic wards or to wards other than those 15 taking part in the study.
- 2. Less than 18 years
- 3. Mental illness
- 4. Admission for only 2 days

Date of first enrolment

01/09/1997

Date of final enrolment

01/09/1999

Locations

Countries of recruitment

United Kingdom

England

Study participating centre
St Bartholomew's & Royal London School of Medicine & Dentistry
London
United Kingdom
E1 1BB

Sponsor information

Organisation

NHS R&D Regional Programme Register - Department of Health (UK)

Funder(s)

Funder type

Government

Funder Name

NHS Executive London (UK)

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?
Results article	results	01/12/2001		Yes	No