Randomised Prospective Trial to compare the efficacy of bolus versus continuous nasogastric feeding in Paediatric Intensive Care

Submission date	Recruitment status	Prospectively registered
28/09/2007	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
28/09/2007	Completed	Results
Last Edited	Condition category	Individual participant data
04/09/2015	Nutritional, Metabolic, Endocrine	Record updated in last year

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 N0220183296

Study information

Scientific Title

Randomised Prospective Trial to compare the efficacy of bolus versus continuous nasogastric feeding in Paediatric Intensive Care

Study objectives

The aim of the study is to compare bolus vs continuous nasogastric feeding in paediatric intensive care in achieving full nutritional requirement in the shortest time.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Prospective non-blinded randomised study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Nutritional, Metabolic, Endocrine: Feeding in intensive care

Interventions

Informed written consent from the parent will be obtained by senior member of medical staff. All patients will be enrolled within 6 hours of admission to PIC. The duration of the study period will either be completion of 48 hours in either randomised arm or discharge from PIC if this occurs sooner. Patients will be randomised at enrolment. Randomisation envelopes will be held in the controlled drugs cabinet in the ICU.

Patients will be randomised to receive either Protocol A (bolus feeds) or Protocol B (continuous feeds). Protocol A and B will only commence after confirmation of nasogastric tube position as per Sheffield Children's Hospital guidelines (available on PIC). Patients' weight and total daily fluid requirement noted (calculated on former as per PIC guidelines). All ventilated patients in PICU are fluid restricted to 80% of their total daily fluid requirement. The full feed allowance hence is 80% maintenance minus fluid administered as medications. Throughout the study period the nasogastric tubes will aspirated every 3 hours and the gastric residual volume recorded.

Intervention Type

Procedure/Surgery

Primary outcome(s)

Time to achieve full entheral feeds by volume.

Key secondary outcome(s))

Not provided at time of registration

Completion date

Eligibility

Key inclusion criteria

As this study is to compare feeding tolerance in Paediatric Intensive Care, patients will be recruited from serial admissions to the PICU. This is a single centre study in a regional intensive care unit of a teaching hospital with 11 beds. All children aged 1 month to 16 years admitted during a period of 6 months. The study period may be shortened or lengthened depending on the sample size to justify enough power for statistical analysis, but it is anticipated that it will not exceed 12 months once started.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

1 months

Upper age limit

16 years

Sex

All

Key exclusion criteria

- 1. Children who have known gastro-oesophageal reflux disease, recent gastro-intestinal surgery, fundoplication, gastrostomy, inflammatory bowel disease, nasojejunal feeding, prokinetic use (Erythromycin, Clarithromycin or Domperidone) and any preset contra-indication to enteral feeds
- 2. Any patient requiring constant carbohydrate or dextrose input, eg metabolic patients
- 3. Patients participating in an ongoing research trial

Date of first enrolment

10/04/2006

Date of final enrolment

15/03/2007

Locations

Countries of recruitment

United Kingdom

England

Study participating centre
Sheffield Children's NHS Foundation Trust
Sheffield
United Kingdom
S10 2TH

Sponsor information

Organisation

Record Provided by the NHSTCT Register - 2007 Update - Department of Health

Funder(s)

Funder type

Government

Funder Name

Sheffield Children's NHS Foundation Trust

Funder Name

NHS R&D Support Funding

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 s

Participant information sheet 11/11/2025 11/11/2025 No

Yes