Improving the care of ventilated preterm babies by weighing them within the incubator

Submission date 12/03/2015	Recruitment status No longer recruiting	Prospectively registered	
		☐ Protocol	
Registration date 18/03/2015	Overall study status Completed	Statistical analysis plan	
		[X] Results	
Last Edited 04/07/2017	Condition category Neonatal Diseases	Individual participant data	

Plain English summary of protocol

Background and study aims

Currently when looking after babies in intensive care, doctors do not have an ability to weigh them accurately if they are ventilated. This means that sick babies have to be disconnected from the artificial breathing machine (ventilator) in order to weigh them. They are then weighed on standalone electronic scales, without the ventilator attached. Since most sick babies do not tolerate this procedure, they are not weighed and this means that medicines, fluids and electrolytes are calculated by estimation (guessing) their weight, which potentially can lead to over or under dosing.

This study aims to determine whether we could safely and accurately weigh ventilated babies within the incubator on integral incubator scales, whilst still connected to the ventilator, by comparing their weight with and without a ventilator tube compensator device against their true (electronic standalone scale) weight.

Who can participate?
Any ventilated stable baby

What does the study involve?

We weighed ventilated babies within the incubator on integral incubator scales, whilst still connected to the ventilator, and compared their weight with and without a ventilator tube compensator device against their true (electronic standalone scale) weight, whilst disconnected from the ventilator.

What are the possible benefits and risks of participating? No direct benefit for infant and no anticipated risks, since only carried out in stable ventilated babies.

Where is the study run from? Salford Royal Foundation Trust (UK)

When is the study starting and how long is it expected to run for? February 2009 to August 2011

Who is funding the study? Investigator initiated and funded

Who is the main contact? Dr Ula El-Kafrawy

Contact information

Type(s)

Scientific

Contact name

Dr Ula El-Kafrawy

Contact details

Royal Bolton Hospital Bolton Manchester Manchester United Kingdom BL4 0JR

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Optimising the care of ventilated infants by weighing accurately on incubator scales

Study objectives

Assessing the accuracy of integral incubator scales in weighing ventilated infants

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cambridgeshire 2 Ethics Committee, 09/04/2008, REC ref: 08/H0308/35

Study design

Diagnostic accuracy study

Primary study design

Observational

Secondary study design

Study setting(s)

Hospital

Study type(s)

Diagnostic

Participant information sheet

Health condition(s) or problem(s) studied

Assessing the accuracy of integral incubator scales in weighing ventilated infants

Interventions

Comparison of weights of ventilated infants when weighed on incubator scales against true weight

Intervention Type

Primary outcome measure

The weight of the ventilated baby was compared by 2 different methods, one by weighing on incubator scales whilst ventilated and one by weighing on freestanding electronic scales whilst not ventilated, the weights were done at baseline within a few minutes of each other. They were then compared by the statistical method of Bland and Altman.

Secondary outcome measures

Inaccuracy correctable by use of a ventilator tube compensator device

Overall study start date

01/02/2009

Completion date

01/08/2011

Eligibility

Key inclusion criteria

Any ventilated baby

Participant type(s)

Patient

Age group

Neonate

Sex

Both

Target number of participants

30

Key exclusion criteria

No exclusion criteria.

Date of first enrolment

01/06/2009

Date of final enrolment

01/02/2011

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Royal Salford Hospital

Salford Manchester United Kingdom M6 8HD

Sponsor information

Organisation

Royal Salford NHS Trust

Sponsor details

Stott Lane Salford England United Kingdom M6 8HD

Sponsor type

Hospital/treatment centre

ROR

https://ror.org/019j78370

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Royal Salford NHS Trust

Results and Publications

Publication and dissemination plan

To publish a medical paper for a paediatric/neonatal journal and currently submitting for publication to the Archives of disease in Children, Fetal & Neonatal edition.

Intention to publish date

31/12/2015

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/12/2016		Yes	No