

# Randomised controlled trial comparing 2 small volume resuscitation fluids in the critically ill

<b>Submission date</b> 30/09/2005	<b>Recruitment status</b> Stopped	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 30/09/2005	<b>Overall study status</b> Stopped	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 07/04/2011	<b>Condition category</b> Signs and Symptoms	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Nihat Bhuiyan

**Contact details**  
AintreeTrust  
University Hospital Aintree  
Lower Lane  
Liverpool  
United Kingdom  
L9 7AL  
+44 (0)151 529 2734  
nihat@doctors.net.uk

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N0025157070

# Study information

## Scientific Title

## Study objectives

Not provided at time of registration

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Not provided at time of registration

## Study design

Randomised controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Not specified

## Study type(s)

Not Specified

## Participant information sheet

## Health condition(s) or problem(s) studied

Signs and Symptoms: Sepsis

## Interventions

No additional invasive procedures will result from participation in this study, other than currently used as our standard clinical practice. All patients will be receiving continuous infusions of analgesic and sedating agents, intubated and receiving pressure controlled ventilation of the lungs throughout the study period, PaO<sub>2</sub> will be kept between 8 and 1 kPa and PaCO<sub>2</sub> will be maintained between 4.5 and 7.0 kPa. The lung ventilation will be pressure controlled to reach a tidal volume between 6-8 mL/kg. No changes in the ventilator setting will be made during the study period. All patients will be requiring continuous infusions of a vasopressor agent (norepinephrine). A thermistor tipped arterial catheter will be inserted into the femoral artery of appropriate patients, as indicated as part of standard current practice by a non-participating Consultant Intensivist. This catheter allows additional measurement of cardiac output by transpulmonary thermodilution and of derived variables including intrathoracic blood volume index, continuous cardiac output by pulse-contour analysis and SVV. All transducers will be positioned at the mid-axillary line and zeroed to atmospheric pressure. Patient consent or

relative's assent will be sought. Following initial resuscitation period and during period of haemodynamic stability patients will be initially monitored for 15 minutes to establish baseline values.

Subsequently all eligible patients will be randomly allocated to receive either 4mls/kg of HyperHAES or Rescueflow over 5 minutes under continuous monitoring of cardiac filling pressures. The fluid bolus will be administered via distal lumen of the CVP catheter. The allocation to fluid group will be done by a non-participating pharmacist who will also hold the randomisation key. Volume resuscitation is indicated if SVV% >15% but ITBVI < 1200 mls/m<sup>2</sup>. 250 mls fluid bolus will be given over 5 mins. No changes in vasopressor therapy during period of measurement. Ventilator settings will not be altered. Any established continuous infusion of maintenance fluid or feed will continue at same set rate throughout study period. Standard biometric data will be collected for each patient along with data to calculate the Acute Physiology and Chronic Health Evaluation II score. Type and rate of inotropic infusions will also be documented. If clinical situation demands a non-participating clinician is able to withdraw patients at any time during the 2 hour study period. Once the study period has ended, standard current clinical practice will continue.

### **Intervention Type**

Other

### **Phase**

Not Specified

### **Primary outcome measure**

Not provided at time of registration

### **Secondary outcome measures**

Not provided at time of registration

### **Overall study start date**

01/01/2005

### **Completion date**

01/12/2007

### **Reason abandoned (if study stopped)**

Participant recruitment issue

## **Eligibility**

### **Key inclusion criteria**

20 patients over 18 years with severe sepsis or septic shock

### **Participant type(s)**

Patient

### **Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Not Specified

**Target number of participants**

20

**Key exclusion criteria**

Not provided at time of registration

**Date of first enrolment**

01/01/2005

**Date of final enrolment**

01/12/2007

**Locations****Countries of recruitment**

England

United Kingdom

**Study participating centre**

**AintreeTrust**

Liverpool

United Kingdom

L9 7AL

**Sponsor information****Organisation**

Department of Health

**Sponsor details**

Richmond House

79 Whitehall

London

United Kingdom

SW1A 2NL

+44 (0)20 7307 2622

dhmail@doh.gsi.org.uk

**Sponsor type**

Government

**Website**

<http://www.dh.gov.uk/Home/fs/en>

**Funder(s)****Funder type**

Government

**Funder Name**

Aintree Hospitals NHS Trust (UK)

**Funder Name**

NHS R&D Support Funding

**Results and Publications****Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration