# How to judge for fluids in collapsed patients with severe infection

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
03/11/2021	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
30/11/2021	Completed  Condition category	Results
Last Edited		Individual participant data
30/11/2021	Signs and Symptoms	Record updated in last year

#### Plain English summary of protocol

Background and study aims

Severe infections cause a condition called sepsis. More severe cases start to collapse and require prompt actions. These actions include fluid infusions to maintain organs. The aim of this study is to find out whether the amount of fluid given to collapsed patients with sepsis should be driven by the results of testing, or whether it should be kept as low as possible.

Who can participate?

Patients aged 18 years and over with severe sepsis

What does the study involve?

Participants are randomly allocated to the infusion of fluids according to the results of tests, or to low fluid infusion.

What are the possible benefits and risks of participating?

The possible benefits are keeping organs perfused to improve outcomes. The risks include excessive fluid administration or under-infusion.

Where is the study run from? Cairo University Hospital (Egypt)

When is the study starting and how long is it expected to run for? February 2018 to January 2021

Who is funding the study? Investigator initiated and funded

Who is the main contact? Dr Walid Mohamed Kamel walidkamel@cu.edu.eg

# Contact information

#### Type(s)

Public

#### Contact name

Dr Walid Ahmed

#### **ORCID ID**

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# Additional identifiers

#### **EudraCT/CTIS** number

Nil known

#### IRAS number

#### ClinicalTrials.gov number

Nil known

# Secondary identifying numbers

Nil known

# Study information

#### Scientific Title

Dynamic testing based versus restrictive based fluid administration following early fluid resuscitation in septic shock patients: a pilot study

# Study objectives

It is hypothesized that the restrictive fluid protocol was comparable in terms of mortality to the dynamic-based testing for fluid responsiveness protocol, following initial fluid resuscitation in septic shock patients. Secondary outcomes were length of ICU stay, mechanical ventilation and need for dialysis.

#### Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 25/02/2018, Critical Care Department, Faculty of Medicine, Cairo University (El Sarayat st., Manial, Cairo, 11562, Egypt; +2 (0)122 7434 117; shereenelgengehy@gmail.com), ref: not applicable

#### Study design

Prospective interventional study

#### Primary study design

Interventional

#### Secondary study design

Non randomised study

#### Study setting(s)

Hospital

#### Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use the contact details to request a participant information sheet. This sheet is in Arabic.

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

Septic shock

#### **Interventions**

This is a prospective cohort study, recruiting septic shock patients, conducted in the Critical Care Department, Cairo University. All patients are initially resuscitated. Patients are assigned according to physician discretion to the restrictive group (fluid administration with a predetermined rate of 1 ml/kg/hour), or the dynamic-based testing group (fluid administration according to dynamic measures, following the passive leg raising method). A positive response is considered when cardiac output increases by 10%.

#### Intervention Type

Other

#### Primary outcome measure

Mortality measured through documenting mortality cases daily during the whole ICU stay

# Secondary outcome measures

Measured during the whole ICU stay:

- 1. ICU length of stay measured through reviewing patient notes
- 2. Need for renal replacement therapy recorded on a daily basis through daily endorsement sheets and nursing documentation
- 3. Need for respiratory support recorded on a daily basis through daily endorsement sheets and nursing documentation
- 4. Need for vasopressors recorded on a daily basis through daily endorsement sheets and nursing documentation

# Overall study start date

25/02/2018

# Completion date

# **Eligibility**

#### Key inclusion criteria

- 1. Patients ≥18 years old
- 2. Diagnosed with septic shock (sepsis with persisting hypotension despite adequate volume resuscitation and/or having a serum lactate level >4 mmol/l (18 mg/dl) requiring vasopressors to maintain mean arterial pressure ≥65 mmHg)

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Both

#### Target number of participants

80

#### Total final enrolment

80

#### Key exclusion criteria

- 1. Patients aged under 18 years
- 2. Refusal to consent
- 3. Conditions that could affect lactate clearance e.g., hepatic, or renal impairment
- 4. Alcoholic patients

#### Date of first enrolment

01/11/2019

#### Date of final enrolment

30/06/2020

# Locations

#### Countries of recruitment

Egypt

# Study participating centre Cairo University Hospitals

Critical Care Department

Faculty of Medicine El Saraya Street Manyal Cairo Egypt 11562

# Sponsor information

#### Organisation

Cairo University

#### Sponsor details

Critical Care Department
Faculty of Medicine
El Saraya Street
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11956
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#### Sponsor type

University/education

#### Website

https://medicine.cu.edu.eg/index.php/en/

#### **ROR**

https://ror.org/03q21mh05

# Funder(s)

# Funder type

Other

#### **Funder Name**

Investigator initiated and funded

# **Results and Publications**

#### Publication and dissemination plan

Planned publication in a peer-reviewed journal

## Intention to publish date

31/01/2022

# Individual participant data (IPD) sharing plan

The datasets generated during and/or analyzed during the current study are/will be available upon request from Dr Walid Mohamed Kamel (walidkamel@cu.edu.eg). Data would be available after publication for 6 months, including data collected during patient evaluation and consents obtained.

# IPD sharing plan summary

Available on request