

# Ultrasound guided jugular vein cannulation

|                                        |                                                   |                                                                                                              |
|----------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>19/03/2008   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol                       |
| <b>Registration date</b><br>08/04/2008 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input type="checkbox"/> Results                       |
| <b>Last Edited</b><br>08/04/2008       | <b>Condition category</b><br>Surgery              | <input type="checkbox"/> Individual participant data<br><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**  
Prof Theodore Liakakos

**Contact details**  
"Attikon" Hospital  
3rd Academic Department of Surgery  
Haidari  
Athens  
Greece  
124 10  
theodlia@otenet.gr

## Additional identifiers

## Study information

**Scientific Title**  
Internal jugular vein cannulation using ultrasound guidance: a prospective randomised controlled trial

**Study objectives**  
Real time ultrasound guided cannulation of the internal jugular vein (IJV) is more efficient than catheterisation using ultrasound located landmarks.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Ethics approval received from "Attikon" Hospital Ethics Committee on the 23rd January 2004 (ref: AP. 420/CP "ATTIKON" Hospital).

**Primary study design**

Interventional

**Study design**

Prospective randomised controlled trial

**Study type(s)**

Treatment

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

Jugular vein cannulation

**Interventions**

Patients who need an internal jugular vein catheter are randomised, using sealed envelopes, in two groups:

Group A (real time ultrasound [U/S]): IJV Cannulation using real time ultrasound

Group B (U/S located landmarks): IJV cannulation using ultrasound located landmarks

Patients with IJV thrombosis were excluded. The success rate of cannulation was measured (attempts less than or equal to three by the same operator), along with the duration of time until successful cannulation and complications.

**Intervention Type**

Procedure/Surgery

**Phase**

Not Specified

**Primary outcome(s)**

Success rate of cannulation, attempts less than or equal to three by the same operator.

**Key secondary outcome(s)**

1. Number of tries
2. Time to complete cannulation
3. Immediate complications (assessed by the operator and his assistance)
4. Place of the catheter using x-ray just after cannulation (assessed by a radiologist)
5. Early complications, measured at days 1, 2 and 5 post cannulation (assessed by a senior surgeon)
6. Later complications (late infections and obstruction of catheters "life" up to six months, assessed by a physician and/or a senior nurse)

**Completion date**

30/05/2008

# Eligibility

## Key inclusion criteria

1. Patients of the "Attikon" Hospital, in General Surgery, Oncology and Haematology Departments
2. Males and females, from 18 - 80 years of age

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Adult

## Lower age limit

18 Years

## Upper age limit

80 Years

## Sex

All

## Key exclusion criteria

Patients with internal jugular vein thrombosis.

## Date of first enrolment

01/02/2004

## Date of final enrolment

30/05/2008

# Locations

## Countries of recruitment

Greece

## Study participating centre

"Attikon" Hospital

Athens

Greece

124 10

# Sponsor information

**Organisation**

"Attikon" Teaching Hospital (Greece) - University of Athens

**ROR**

<https://ror.org/03gb7n667>

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

Hospital/treatment centre

**Funder Name**

"Attikon" Teaching Hospital (Greece) - University of Athens

**Results and Publications**

Individual participant data (IPD) sharing plan

**IPD sharing plan summary**

Not provided at time of registration