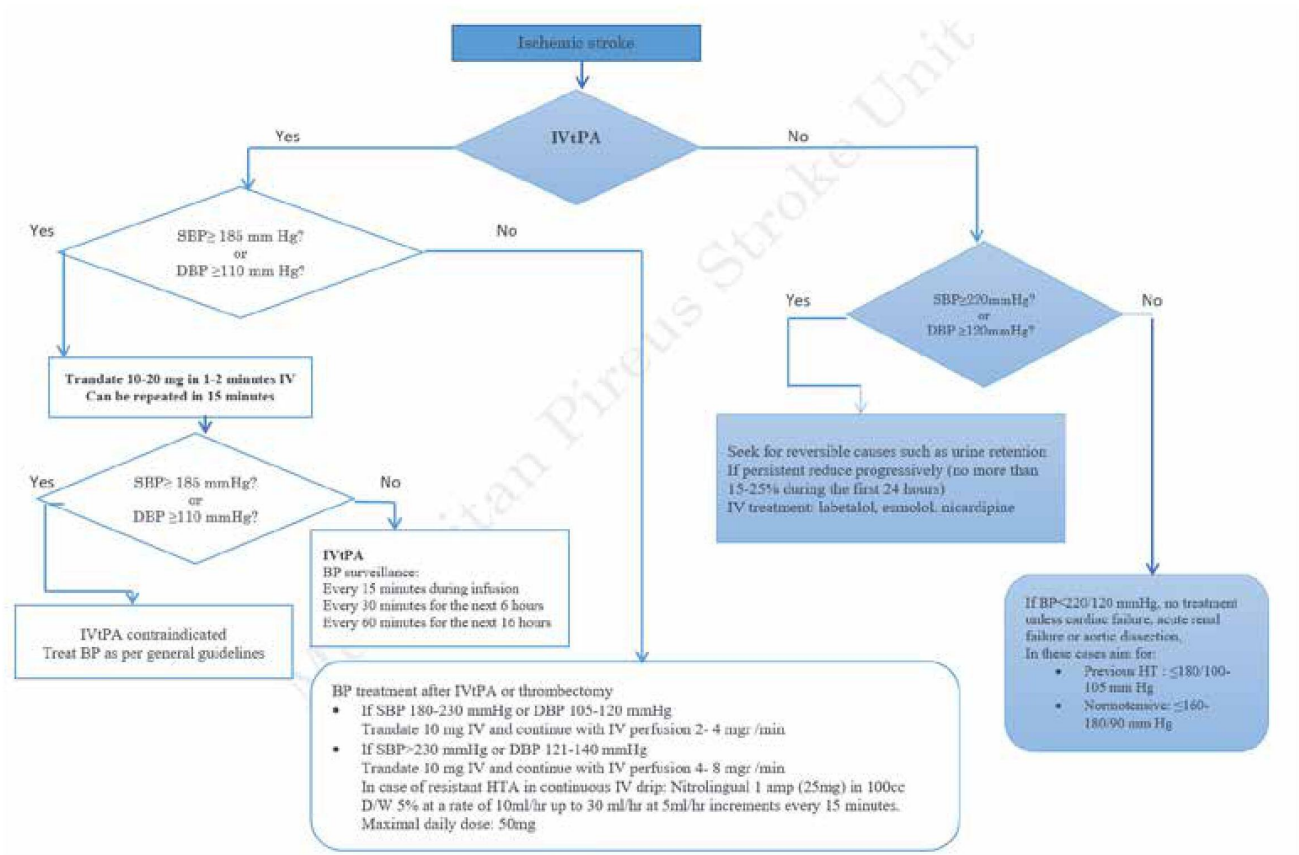
METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for Hypertension treatment	Date: 01SEP22 Code: E.1.2 Version: 2.0



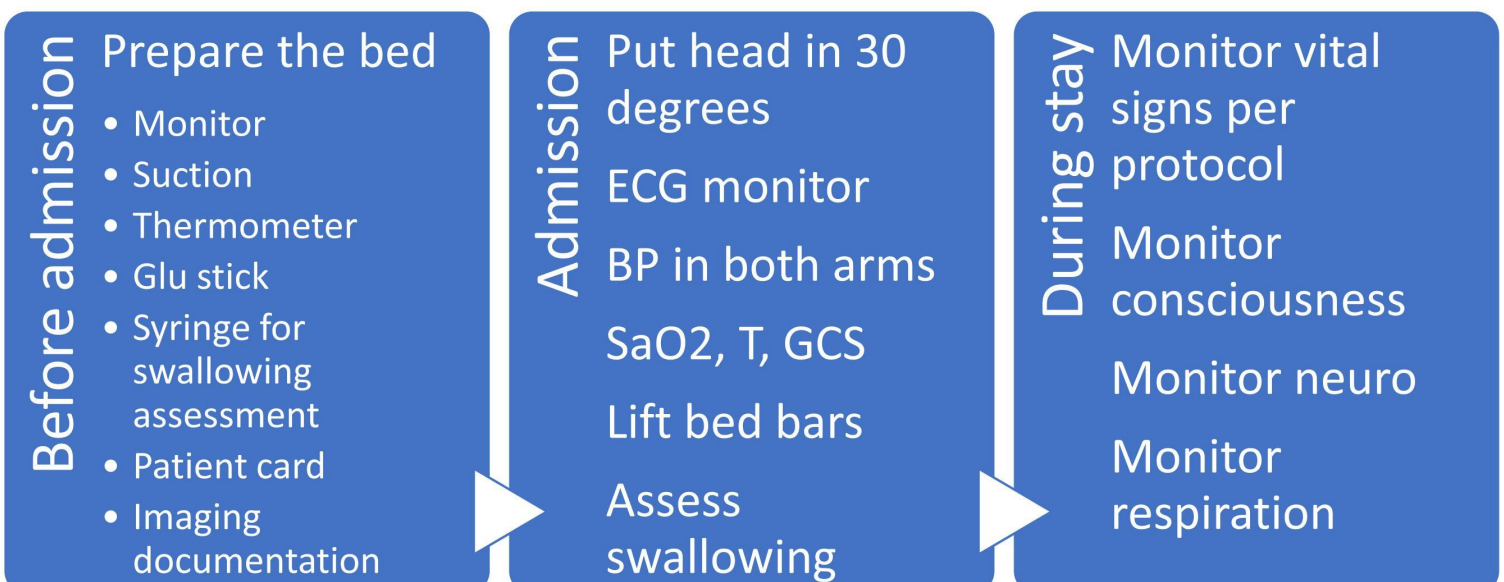
BP treatment in hemorrhagic stroke

Acute treatment of HTN in the first hours after hemorrhagic stroke is safe and leads to reduced hematoma volume that could lead to better prognosis. Treat as per ischemic stroke protocol but aim for SBP<140 mmHg

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for nursing of stroke patients	Date: 01SEP22 Code: E.1.3 Version: 2.0

SOP in Greek attached

Outline:



METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for respiratory problems	Date: 01SEP22 Code: E.1.4 Version: 2.0

Aim

Adequate respiratory function is prerequisite for maintaining oxygen transfer to the brain in acute stroke.

Clear airways (from foreign bodies or food) and preventing pulmonary infections (by clearing bronchial secretion) are primordial.

Take measures in order to avoid pulmonary congestion and inhalation pneumonia.

Doctor

1) Clinical evaluation: LOC, cyanosis, pulmonary auscultation, assessment of breathing frequency and pattern
2) **Medical orders :**
   a. Oximetry monitoring
   b. Oxygen supplementation if necessary
   c. Respiratory physiotherapy
3) Decides if compromise of respiration is imminent in order to proceed to mechanical support and intubation

Nurse

Diagnosis :

- Respiratory compromise
- Bronchial congestion
- Cough reflex abolition
- Bed sores
- Inhalation

Interventions :

- Remove any dental prostheses
- Clinical evaluation: skin color, bronchial congestion
- Inform the attending physician for abnormal pattern or frequency of respiration
- Place the patient on the bed and elevate the head up to 30 degrees, elevate the head if vomiting is imminent
- Assess for swallowing disorders
- Monitor oximetry
- Bronchial suction
- Educate patient if possible

Physiotherapist

1) Completes assessment
2) Respiratory physiotherapy

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for fever and infections	Date: 01SEP22 Code: E.1.5 Version: 2.0

Aim

Hyperthermia in the acute phase after stroke leads to worse outcome.

Post-stroke infections are usually UTIs or pneumonias.

Doctor

1) Prescribes the frequency of body temperature taking.
2) Any rise in body temperature should prompt for etiologic work-up of probable infection.
   a. Treat fever > 37,8 °C with paracetamol
   b. If T > 38.5 take blood cultures, order CXR and urinalysis and urine culture.

Antibiotic therapy can start empirically, but it should be adapted according to culture results and antibiogram.

Nurse

Diagnosis:

Hyperthermia

Infection risk associated with :

1. *Ineffective protection of airways*
2. *Ineffective clearing of bronchial secretions*
3. *Incomplete bladder emptying*
4. *Urine incontinence*
5. *Urine retention*
6. *Dysphagia*

Increased infection risk related to:

1. *Diminished level of consciousness.*
2. *Gag reflex suppression.*
3. *Inability to maintain sitting posture.*
4. *Immobilization.*

Interventions :

1) Body temperature at admission
2) Screen for infection risk factors and recognize patients at risk
3) Risk factors: age, comorbidities (COPD, diabetes, cancer etc)
4) Monitor temperature
   If T > 38.5 take blood cultures, order CXR and urinalysis and urine culture.

   Infection prevention:
5) Wash hands before and after caring for the patient

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for electrolyte disorders	Date: 01SEP22 Code: E.1.6 Version: 2.0

AIM

Regular surveillance of electrolyte balance is important to avoid cerebral edema, hemoconcentration and other metabolic disturbances that could increase thromboembolic risk

Doctor

1) IV hydration with Normal Saline 0.9% at a rate 80-120cc/h
2) In elderly patients and those with cardiac failure: 500cc/24h.
3) Chemistry panel and complete blood count at admission
4) Adjust electrolyte according to chemistry panel results
5) Check for fluid overload
6) Order central venous catheter if necessary

Nurse

Diagnosis:

Electrolyte disturbances due to dehydration because of inadequate fluid intake related to dysphagia or severe hemiparesis.

Interventions:

1) Confirm correct placement of peripheral vein access
2) Replace peripheral vein if blocked
3) Monitor diuresis, check for peripheral edema

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for glycemia	Date: 01SEP22 Code: E.1.7 Version: 2.0

AIM

Hyper- and hypo-glycemia in acute stroke are correlated with worse prognosis.

Medical treatment is indicated when Glucose> 150 mg/l

Doctor

1) Checks for history of diabetes mellitus
2) Determines glucose check frequency
3) Prescribes insulin if necessary, sc or IV if glucose>400mg/dl
4) If CTA is ordered, treatment with metformin is withheld for 2 days

Nurse

Diagnosis :

Regularly check blood glucose

1) Monitor of blood sugar
2) Recognize signs of hypoglycemia and rechecks blood sugar

Insulin scale:

- 2 U Actrapid if glucose between 144 - 180 mg/dl
- 4 U Actrapid if glucose between 180 - 216 mg/dl
- 6 U Actrapid if glucose between 216 - 252 mg/dl
- 8 U Actrapid if glucose between 252 - 288 mg/dl
- 10 U Actrapid if glucose between 288 - 324 mg/dl
- 12 U Actrapid if glucose >324 mg/dl

Patients with enteric nutrition:

- treat with insulin before meals
- insulin pump is persistent hyperglycemia starting at 0,5-1U/h

Patients with persistent high glucose values (>270 mg/dl):

- insulin pump (0,5-1U/h)

Patients with insulin-dependent diabetes mellitus:

- Patients at risk of ketoacidosis if insulin treatment is withheld. Insulin pump in initiated titrated according to the usual total daily insulin dose. For example, if patient injects 12U+14U daily, we start at 1U/h.

If glucose < 108mg/dl we reduce to 0,5U/h.

In hypoglycemia we proceed with immediate glucose administration but we generally avoid withholding insulin treatment.

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for Venous thromboembolism prevention	Date: 01SEP22 Code: E.1.8 Version: 2.0

AIM

Check regularly for signs of lower limb venous thrombosis.

Doctor

1) Orders mobilization of stroke patient 24 hours post admission if she/he is neurologically stable unless critical extra- or intra-cranial stenosis that could jeopardize brain perfusion at upright position.
2) Hemodynamic assessment of intracranial arteries is performed at admission with transcranial Doppler by the attending physician.
3) Prophylactic treatment with LMWH within 24h in patients with ischemic stroke for patients that cannot be fully mobilized. Assess renal function and adjust dose accordingly.
4) Intermittent pneumatic compression devices are placed in patients with contraindications to anticoagulation such as hemorrhagic stroke before stabilization.
5) In hemorrhagic stroke placement of intermittent pneumatic stockings at admission and after brain imaging confirmation of stabilization of hematoma LMWH 24-48 hours later.
6) **Prescribe early patient mobilization but not within 24 hours of admission**

Nurse

Diagnosis:

All stroke patients are a priori considered at risk for:

- DVT
- Pulmonary embolism

Interventions:

1) Hypoesthesia, severe paresis, expression aphasia and impaired vasomotor reflex in lower limbs predispose for DVT.
2) Prevention consists in early patient mobilization and prophylactic dose of LMWH after medical prescription.
3) **Non pneumatic stockings are inefficient in preventing thrombotic complications.**

Physiotherapist

Passive or active patient mobilization should start as soon as possible.

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for 2ry prevention	Date: 01SEP22 Code: E.1.9 Version: 2.0

Aim

Antiplatelet treatment (Aspirin initial dose 325mg, then 100mg/day) is initiated at admission unless IVtPA is performed; in that case antithrombotic treatment may be initiated 24hours after uneventful treatment.

Anticoagulation therapy (heparin, LMWH) at therapeutic doses is not indicated in acute ischemic stroke even in the case of atrial fibrillation.

In special cases anticoagulation may be prematurely started : presence of intracardiac thrombus, thrombus residing on an atherosclerotic plaque or extracranial artery dissection.

Selecting antithrombotic therapy should consider risk benefit ratio, as the risk of symptomatic hemorrhagic conversion is increased with ischemic lesion volume, high blood pressure etc.

Doctor

1) Antithrombotic therapy should be initiated shortly after the diagnosis of ischemic stroke
2) Therapy selection depends on :
    a. Ischemic stroke volume
    b. Ischemic stroke etiology
    c. Patient comorbidities
    d. Patient's general state
3) LMWH dosing is titrated according to patient's weight and renal function
4) When antivitamin K is preferred aim for INR 2-3 unless metallic valves or special indications
5) Direct oral anticoagulation treatment: estimate GFR and prescribe dose according to guidelines for each DOAC
6) No antithrombotic treatment within 24 hours of IVtPA unless concomitant intravascular treatment that necessitated intraarterial stent placement.

Nurse

Diagnosis

1. Check for any sign of hemorrhage after tPA
2. Assess for hypotension, tachycardia and other signs of internal bleeding after tPA.

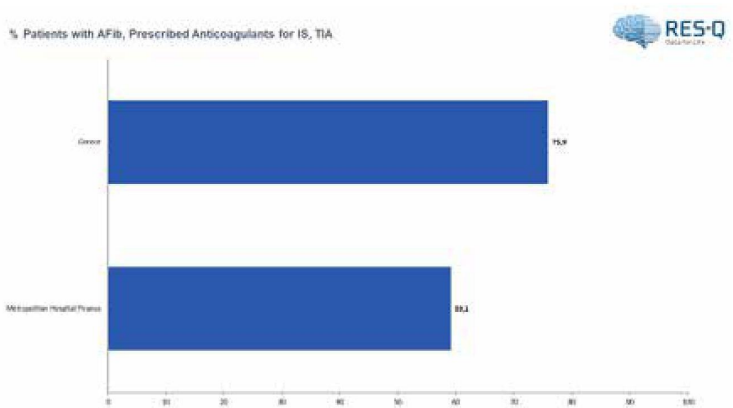
METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for 2ry prevention metrics	Date: 01SEP22 Code: E.1.10 Version: 2.0

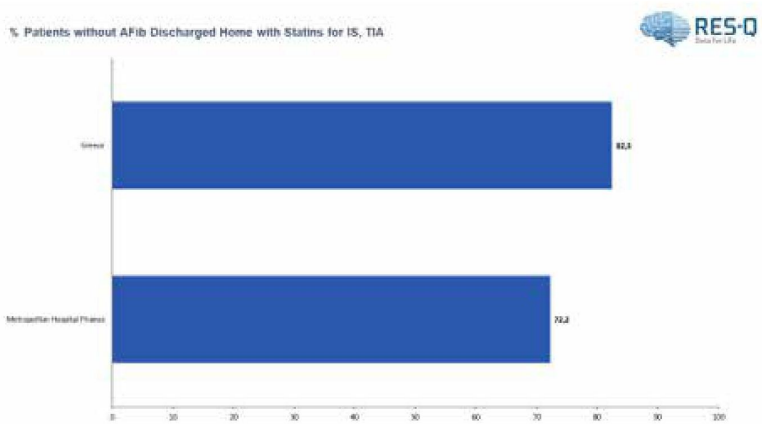
RES-Q Data for Life

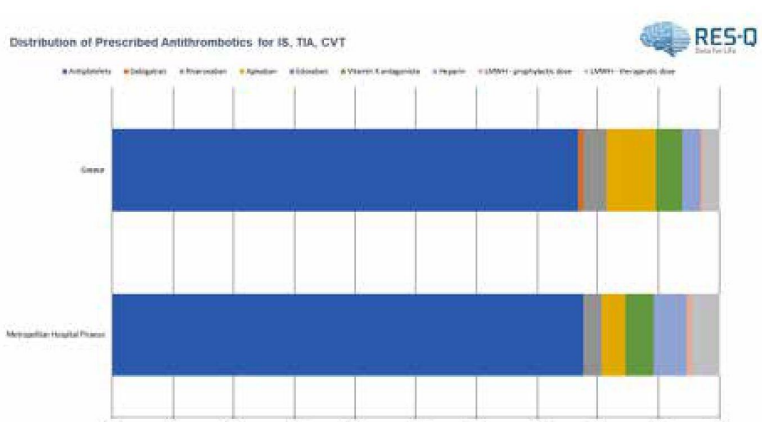
Greece

Data Summary Y-2021

Report was generated on July 18, 2022







METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for pain	Date: 01SEP22 Code: E.1.11 Version: 2.0

Aim

Pain should be treated regardless the cause.

Doctor

First choice is paracetamol. Treatment should be promptly initiated.

Nurse

Diagnosis:
Acute pain
Chronic pain exacerbation

Interventions:
Assess for pain regularly
Careful attention to aphasic patients that can express pain non-verbally
Carefully place the patient into bed
Carefully mobilize patient
Protect the hemiplegic shoulder

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for brain edema	Date: 01SEP22 Code: E.1.12 Version: 2.0

Aim

10-20 % of patients with ischemic stroke may develop brain edema 3-5 days post stroke. In severe cases brain edema may lead to brain herniation and death. Patients with large hemispheric infarcts. especially when young, are at risk of malignant cerebral ischemia.

Doctor

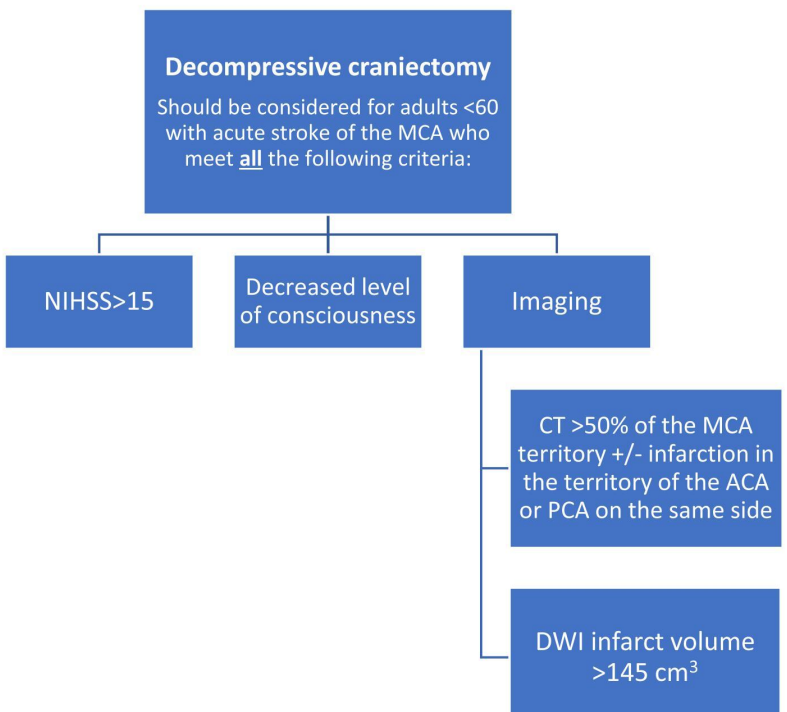
1) Osmotic treatment is not of proven benefit, have short-term effects and may lead to deterioration.
2) Patient's head should be lifted at 30°.

Nurse

Diagnosis:

Assess LOC and immediately communicate any deterioration
Regularly check for pupil size asymmetry

METROPOLITAN HOSPITAL	E1 stroke pathways, SOP for decompressive craniectomy	Date: 01SEP22 Code: E.1.13 Version: 2.0



Should be performed within 48h from onset

Craniectomy diameter should be >12cm

Neurosurgeon responsible: Dr Stavrinou

The neurosurgeon should be pre-notified for any patient at risk for malignant infarction

Typical presurgical measures should be taken

- Nil per nasogastric tube
- Coagulation panel
- Ask for at least 2RBCs

METROPOLITAN HOSPITAL	**E1 stroke pathways, general instructions for NeuroSurg advice for ICH other than malignant MCA infarction**	**Date: 01SEP22** **Code: E.1.14** **Version: 2.0**

Intracranial hemorrhage

Surgical treatment is absolutely indicated in **cerebellar hematoma** causing either direct pressure on the brain stem or hydrocephalus or in cases when the patient deteriorates.

In supratentorial hematomas, neurosurgery should be considered in **sizeable lobar hemorrhages that are <1 cm from the surface of the brain**. Comatose patients should be intubated and transferred to the intensive care unit.

Otherwise surgery is generally associated with a worse outcome, especially in deep ICH and in patients who are already in a coma. In cases of **impending herniation** immediate surgical evacuation of the hematoma can be life-saving and treating options should be thoroughly discussed with family.

A neurosurgical evaluation is demanded at admission in ICH patients other than those that are stable with limited deep ICH.

At day 2 a CT or MR scan of control is made to assess for evolution or complications of the hematoma.

During working hours Dr Stavrinou is called to assess a stroke patient. At night and on weekends the neurosurgeon on duty is called.

METROPOLITAN HOSPITAL	E1 stroke pathways, hyperosmotic therapy	Date: 01SEP22 Code: E.1.15 Version: 2.0

Hypertonic NaCl solution of 2% for the treatment of cerebral edema.

Use a good peripheral venous catheter; no central venous catheter needed.

Get a solution with 500cc N / S and remove 50cc. Add to this 15% 50cc NaCl (ampoules of 10 and 20 ml). We therefore produce a hypertonic saline concentration 2.03%.

Then administer 500cc of this solution at a rate not exceeding 75cc/hr. Sodium should be measured every 6 hours aiming 145-155mg/dl.

We usually start at 30cc / hour for the first six hours and gradually raise the rate of infusion according to sodium values.

Treating ICH due to antivitamin K treatment with PCC (prothrombin concentrated complex):

If INR <2 no PCC

If INR>=2 PCC give Beriplex at 30 iu/kg. Each Beriplex contains 500iu/vial. Slow bolus at 3 min for every vial. Each vial after reconstitution with water for injection will contain 20ml. Infusion rate should not exceed 8ml/min.

Example: For a 80kg patient we will give 5 vials to cover the dose of 2400iu. 5 vials are to be infused in 20 minutes.

METROPOLITAN HOSPITAL	E1 stroke pathways, general supporting measures for ICH patients (Greek) for use by the nurses of the Stroke Unit	Date: 01SEP22 Code: E.1.17 Version: 2.0

ΓΕΝΙΚΑ ΥΠΟΣΤΗΡΙΚΤΙΚΑ ΜΕΤΡΑ ΑΝΤΙΜΕΤΩΠΙΣΗΣ ΕΝΔΟΕΓΚΕΦΑΛΙΚΗΣ ΑΙΜΟΡΡΑΓΙΑΣ

Επιμέλεια: Γ. Τσιβγούλης, Α. Σαφούρης, Ο. Καργιώτης

METROPOLITAN HOSPITAL

ΜΟΝΑΔΑ ΑΕΕ

ΔΙΕΥΘΥΝΤΗΣ: Ε.ΣΤΑΜΠΟΥΛΗΣ

- Ενδοφλέβια χορήγηση N/S για ενυδάτωση: 1.5-2 Λίτρα ημερησίως σε ασθενείς χωρίς ιστορικό Καρδιακής Ανεπάρκειας και 0.5-1 Λίτρο ημερησίως σε ασθενείς με ιστορικό Καρδιακής Ανεπάρκειας
- Αποφυγή χορήγησης ορών που περιέχουν γλυκόζη (αποφυγή χορήγησης D/W 5%)
- Χορήγηση οξυγόνου με ρινικό σωλήνα (3 Lt/min) εφόσον ο κορεσμός του οξυγόνου είναι <95%
- Αντιμετώπιση της σοβαρής υπογλυκαιμίας (<50 mg/dl) με την ενδοφλέβια χορήγηση δεξτρόζης ή διαλύματος γλυκόζης συγκέντρωσης 10%–20%.
- Εκτίμηση κατάποσης πριν από την έναρξη σίτισης του ασθενούς
- Έναρξη σίτισης μέσω ρινογαστρικού σωλήνα εντός 48 ωρών σε ασθενείς με ΑΕΕ και διαταραχές της κατάποσης.
- Σε κλινική υποψία πνευμονίας από εισρόφηση ή ουραλοίμωξης συνιστάται άμεση εμπειρική έναρξη αντιβιοτικής αγωγής μετά από συνεννόηση με τον Ιατρό.

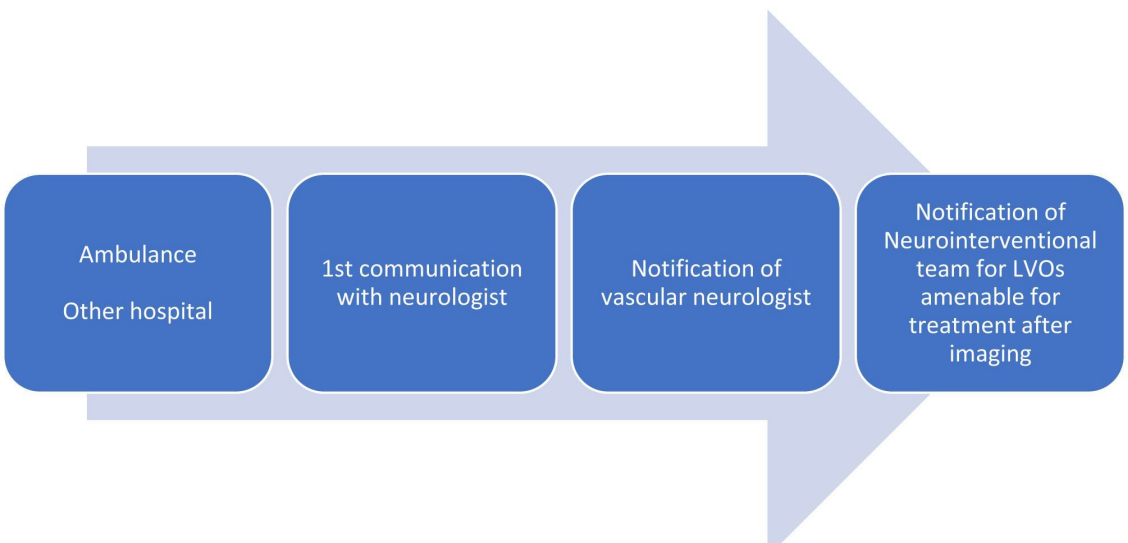
Ενδεικτικά θεραπευτικά σχήματα σε κλινική υποψία πνευμονίας από εισρόφηση:

1. iv Begalin 3gx3 2. iv Tazocin 4.5gx3 3. iv Meronem 2gx3.

- Δε συνιστάται η χορήγηση συμπληρωμάτων διατροφής
- Συνιστάται η άμεση κινητοποίηση του ασθενούς (>48 ώρες)
- Σε ασθενείς με Ισχαιμικό ΑΕΕ και περιορισμένη κινητικότητα συνιστάται η εφαρμογή συσκευών εξωτερικής συμπίεσης των άκρων.
- Η τοποθέτηση ειδικών καλτσών δε σχετίζεται με την αποπλασματική πρόληψη της εν τω βάθει φλεβοθρόμβωσης σε ασθενείς με Ενδοεγκεφαλική Αιμορραγία και θα πρέπει να διενεργείται μόνο μετά από σχετική συνεννόηση με τον Ιατρό.

METROPOLITAN HOSPITAL	**E.2 There are conceptual written protocols in relation to the EMS, ED, and referring institutions.**	**Date: 01SEP22** **Code: E.2.1** **Version: 2.0**

Metropolitan Hospital is a private Hospital that does not make part of the National System of Care and public ambulances are not allowed to transfer patients to private hospitals.
Metropolitan Hospital's ambulances have their own protocols for acute stroke patients. The attending neurologist will be informed when an ambulance is sent for a possible acute stroke patient. She/he will inform the vascular neurologist on call. After arriving to the scene, there will be a telephone call of the doctor or nurse in the ambulance to confirm suspicion of possible stroke and the stroke team will be notified.



METROPOLITAN HOSPITAL	E.2 There are conceptual written protocols for possible acute stroke in the emergency department	Date: 01SEP22 Code: E.2.2 Version: 2.0

1. Notify neurologist
2. Keep patient lying
3. Check BP from both hands
4. Glucose measurement
5. Secure 2 IV lines
6. Blood tests to be sent ASAP: Complete blood count, INR, PT, PTT, Glu, Ur, Cr, Na, K, CRP, Troponin, SGOT, SGPT
7. Ask for brain CT and prepare admission documents
8. If possible, check for
    i. time of onset
    ii. antithrombotic treatment
    iii. recent surgery

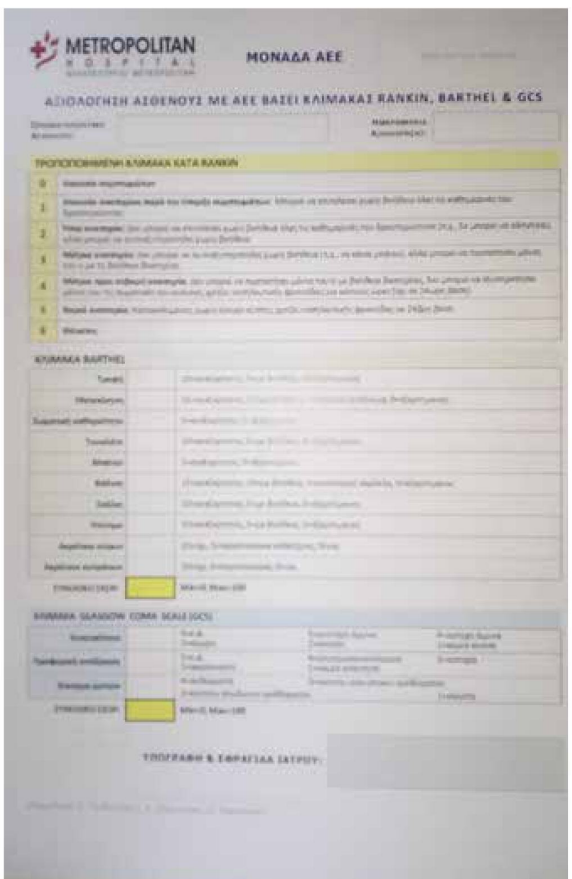
METROPOLITAN HOSPITAL	**E3 There are conceptual written protocols for all needs of rehabilitation**	**Date: 01SEP22** **Code: E.3** **Version: 2.0**

Initial evaluation of patient independency is performed by SU's neurologist using the modified Rankin Score, Barthel Index and Glasgow Coma Scale (in Greek)

Stroke patients are evaluated by a specialist doctor in rehabilitation, Dr , specialist in physical and rehabilitation medicine, is the Medical Director of the Department of Physical Medicine and Rehabilitation of Metropolitan Hospital.

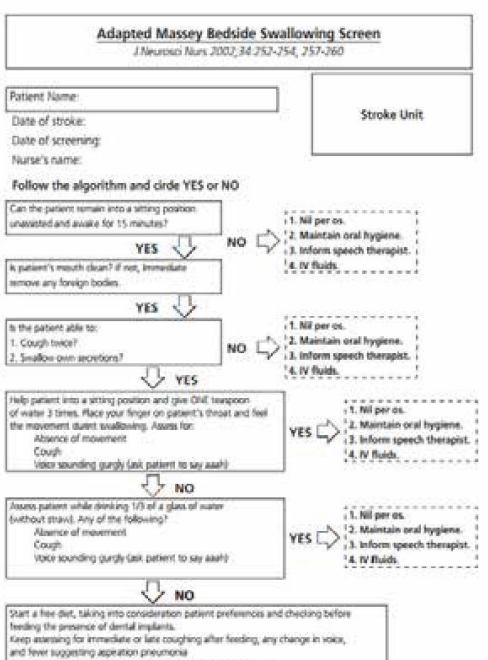
See attached CV.

Patients with minor deficits take work leave at discharge, and physiotherapy is prescribed.



METROPOLITAN HOSPITAL	**E4 The stroke team establishes and works after a defined concept for swallowing disorders**	**Date: 01SEP22** **Code: E.4.1** **Version: 2.0**

Swallowing testing using the Massey protocol



Adapted Massey Bedside Swallowing Screen

J Neurosci Nurs 2002;34:252-254, 257-260

Patient Name:

Date of stroke:

Date of screening:

Nurse's name:

Stroke Unit

Follow the algorithm and circle YES or NO

Can the patient remain into a sitting position unassisted and awake for 15 minutes?

YES ⇩ NO ⇨ 1. Nil per os. 2. Maintain oral hygiene. 3. Inform speech therapist. 4. IV fluids.

Is patient's mouth clean? If not, immediate remove any foreign bodies.

YES ⇩

Is the patient able to:
1. Cough twice?
2. Swallow own secretions?

NO ⇨ 1. Nil per os. 2. Maintain oral hygiene. 3. Inform speech therapist. 4. IV fluids.

YES ⇩

Help patient into a sitting position and give ONE teaspoon of water 3 times. Place your finger on patient's throat and feel the movement during swallowing. Assess for:
Absence of movement
Cough
Voice sounding gurgly (ask patient to say aaah)

YES ⇨ 1. Nil per os. 2. Maintain oral hygiene. 3. Inform speech therapist. 4. IV fluids.

NO ⇩

Assess patient while drinking 1/3 of a glass of water (without straw). Any of the following?
Absence of movement
Cough
Voice sounding gurgly (ask patient to say aaah)

YES ⇨ 1. Nil per os. 2. Maintain oral hygiene. 3. Inform speech therapist. 4. IV fluids.

NO ⇩

Start a free diet, taking into consideration patient preferences and checking before feeding the presence of dental implants.
Keep assessing for immediate or late coughing after feeding, any change in voice, and fever suggesting aspiration pneumonia
Any of the above prompt immediate call to the speech therapist.

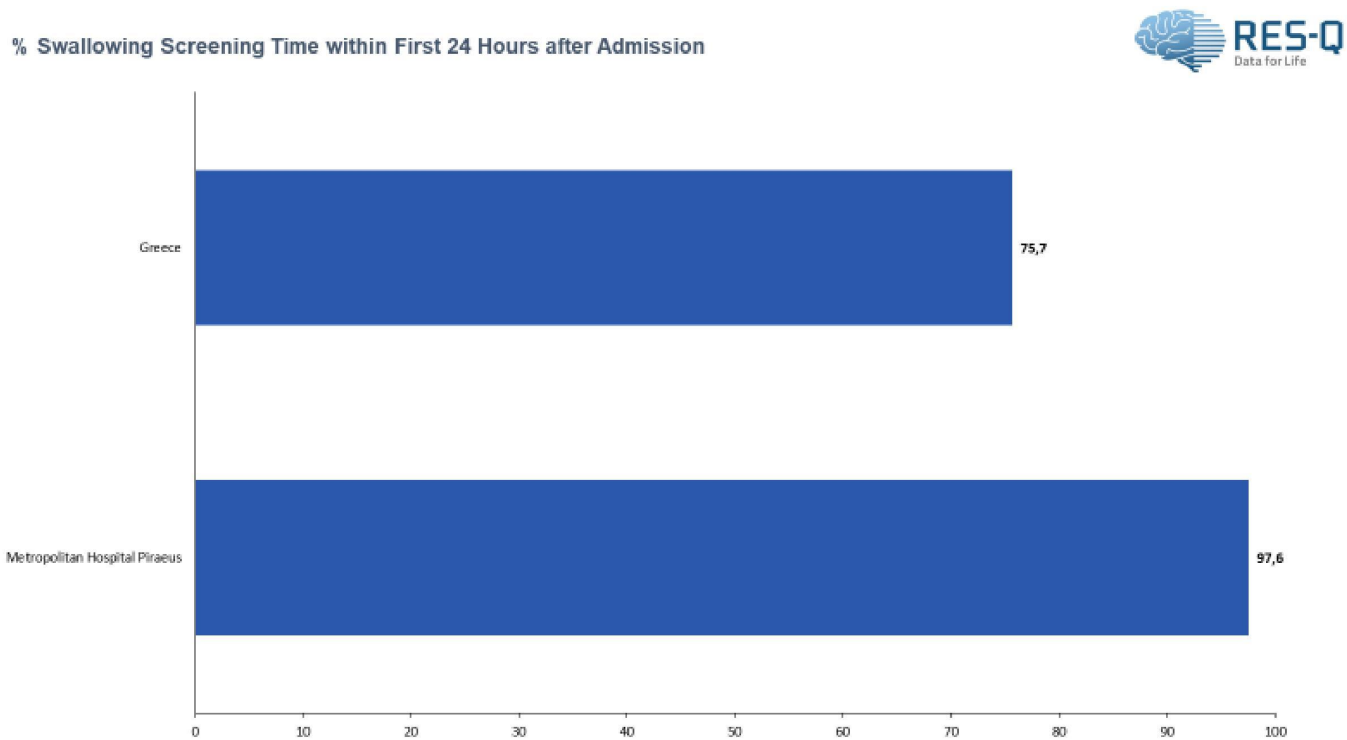
Dr Kefalonitis, neurologist: external associate that visits the Stroke Unit 3/wk when assessments for Fiberoptic endoscopic evaluation of swallowing (FEES) are needed.

Patients needs for nutrition are discussed with the dietician.

We avoid gastrostomy placement in the first month post stroke. In selected patients with severe stroke, gastrostomy may be placed endoscopically by Dr Grammatopoulos, gastroenterologist.

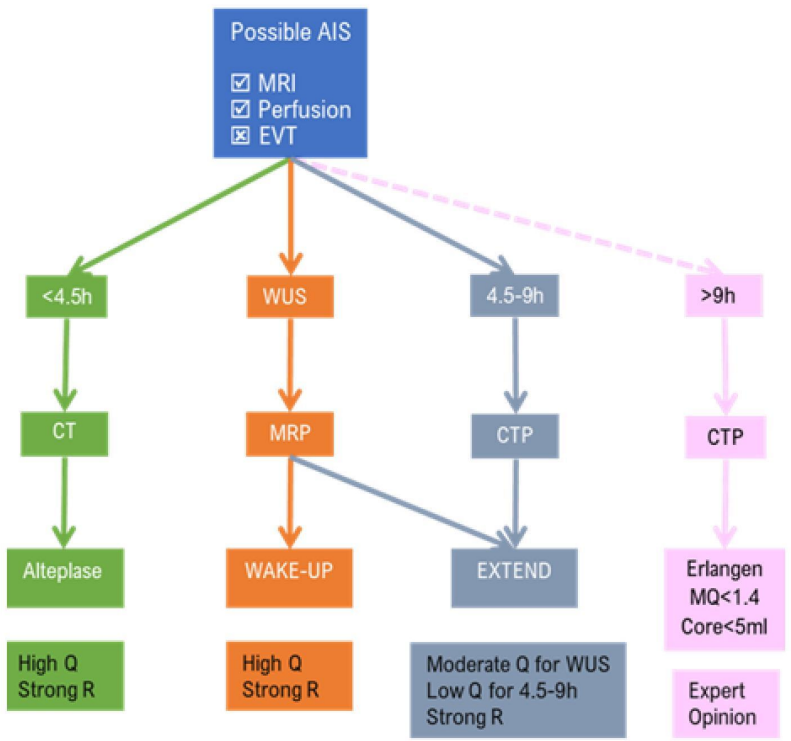
A report of the diagnostic testing follows the patient at the transfer to the rehabilitation center to inform speech therapists and nurses.

METROPOLITAN HOSPITAL	E4 The stroke team establishes and works after a defined concept for swallowing disorders Metrics	Date: 01SEP22 Code: E.4.2 Version: 2.0



METROPOLITAN HOSPITAL	**E5 IV-thrombolysis is always available 24/7. The indication is made by the attending stroke physician.**	**Date: 01SEP22** **Code: E.5.1** **Version: 2.0**

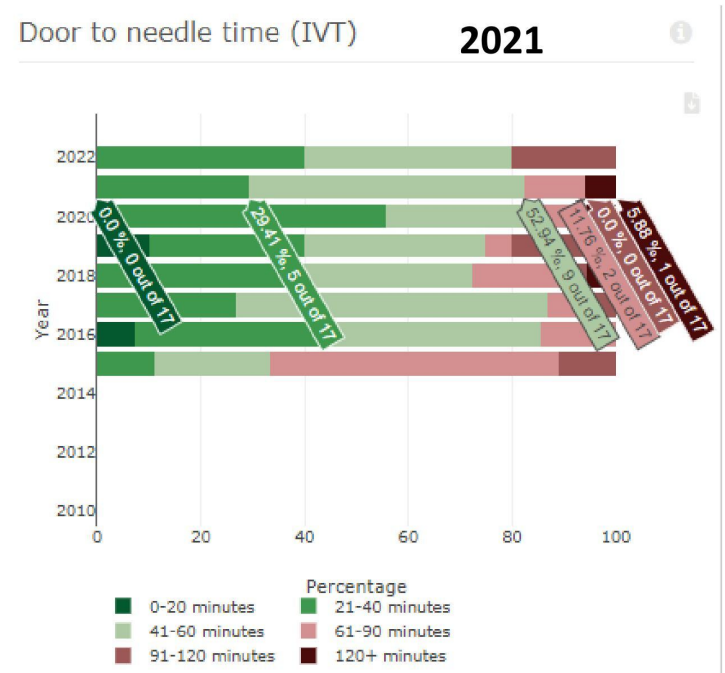
State-of-the-art acute ischemic stroke algorithm for non-LVO stroke.
The indication is always made by the vascular neurologist who is physically present.
Vascular neurologists are required to be present at the hospital within 30 minutes of code stroke.

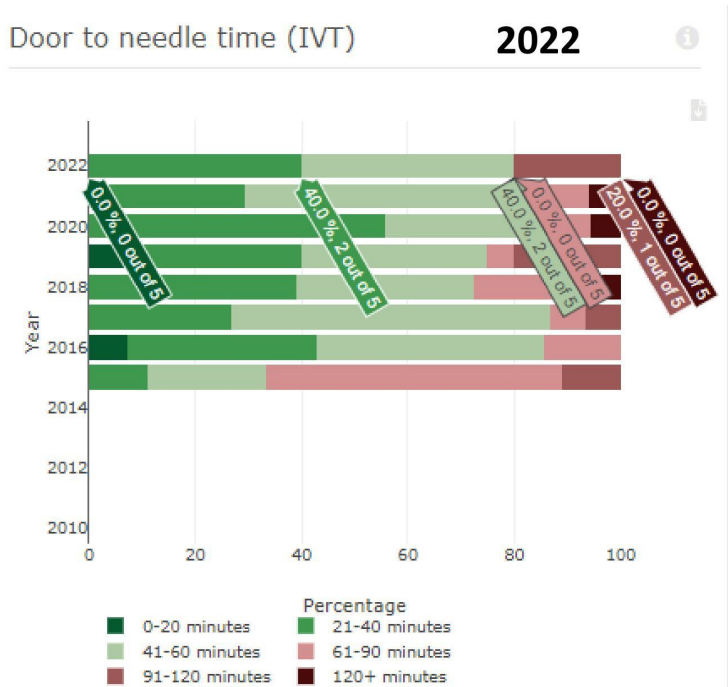


Magoufis G, Safouris A, et al. Acute reperfusion therapies for acute ischemic stroke patients with unknown time of symptom onset or in extended time windows: an individualized approach. Ther Adv Neurol Disord. 2021 Jun 2;14:17562864211021182. Free full-text available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8175833/

METROPOLITAN HOSPITAL	**E5 IVT.** Time from EMR arrival to thrombolysis (e.g., **Door to needle time**, complication rate) will be assessed and documented.	**Date: 01SEP22** **Code: E.5.2** **Version: 2.0**

Door to needle times *were significantly increased throughout the pandemic. All patients need to be checked for Covid infection before being admitted. Any Covid positive patient, even if she/he presents with acute ischemic stroke, is prohibited by law to be hospitalized in non-Covid hospitals.*
Only selected public hospitals in Greece accept Covid patients.





METROPOLITAN HOSPITAL	**E5 IVT. Time from EMR arrival to thrombolysis (e.g., Door to needle time, complication rate) will be assessed and documented. Time metrics SITS registry 2021**	**Date: 01SEP22** **Code: E.5.3** **Version: 2.0**

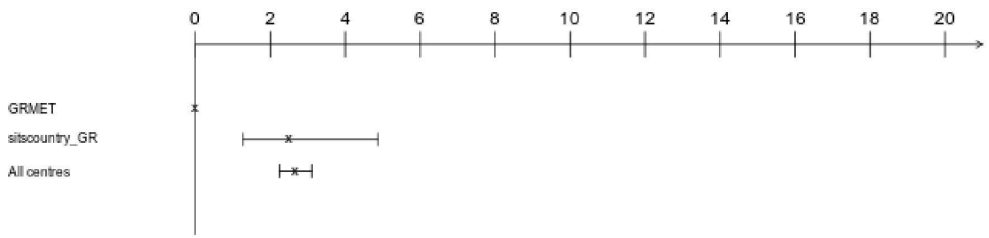
Time delay (minutes)		Centre	Country	All centres
Onset to treating hospital/door time	Median	120.0	110.0	120.0
Door to imaging study time	Median	22.5	28.0	25.0
Door to treatment/needle time	Median	50.5	60.0	57.0
Onset to treatment/needle time	Median	185.0	175.0	160.0

Country: Greece
Centre Id: GRMET
Output type: timeLogisticsDelay
User Id: strokeunitmetropolitan-hospitalgr

all parameters in search	parameter value
Day Interval	2021/01/01 to 2021/12/31

METROPOLITAN HOSPITAL	E5 IVT complication rate will be assessed and documented sICH (ECASS) 2021 SITS Registry	Date: 01SEP22 Code: E.5.4 Version: 2.0

SICH-ECASS REPORT



	N	SICH patients	non-SICH patients	Missing values	Proportion SICH defined (pct.)	Lower confidence limit (pct.)	Upper confidence limit (pct.)
GRMET	17	0	17	0	0		
sitscountry_GR	329	8	311	10	2.51	1.28	4.87
All centres	5881	145	5338	398	2.64	2.25	3.1

Supplementary search criteria: getProtocol in ("standard1", "ivtpmini"), (getDateTimeStrokeOnSet BETWEEN "2021/01/01 00:00"

Date and hour of report data: 20220808 13 (Ymd H)
User printing report: strokeunitmetropolitan-hospitalgr

Country: Greece
Centre Id: GRMET
Output type: sichECASS
User Id: strokeunitmetropolitan-hospitalgr

all parameters in search	parameter value
Protocol	standard1_ivtpmini
Day Interval	2021/01/01 to 2021/12/31

METROPOLITAN HOSPITAL	E5 IVT complication rate will be assessed and documented Safety outcomes 2021 SITS Registry	Date: 01SEP22 Code: E.5.5 Version: 2.0

Country: Greece
Centre Id: GRMET
Output type: safetyOutcomeDetails
User Id: strokeunitmetropolitan-hospitalgr

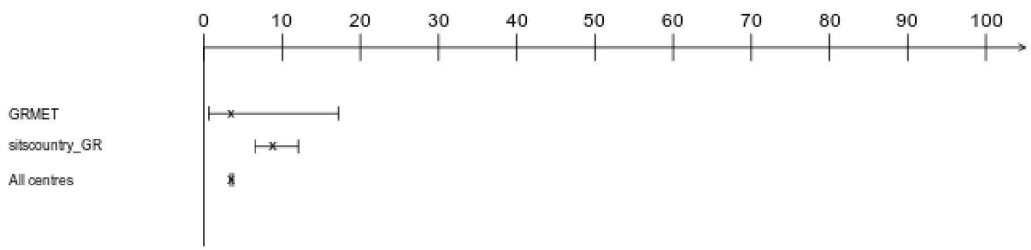
all parameters in search	parameter value
Protocol	standard1_ivtpmini
Day Interval	2021/01/01 to 2021/12/31

SAFETY OUTCOME DETAILS

Parameters		Centre	Country	All centres
SICH SITS Most	Percent	0.00%	1.23%	0.71%
SICH ECASS	Percent	0.00%	2.51%	2.64%
SICH RCT	Percent	0.00%	4.01%	4.14%
Death	Percent	0.00%	9.14%	4.59%
Significant deterioration	Percent			

METROPOLITAN HOSPITAL	E5 Mortality (IVT and MT) 2021 SITS Registry	Date: 01SEP22 Code: E.5.6 Version: 2.0

Variable: Dead within 3 months



	N	Dead within 3 months	Not dead within 3 months	Missing values	Proportion Dead (pct.)	Lower confidence limit (pct.)	Upper confidence limit (pct.)
GRMET	29	1	28	0	3.45	0.61	17.18
sitscountry_GR	416	37	379	0	8.89	6.52	12.02
All centres	34739	1233	33506	0	3.55	3.36	3.75

Supplementary search criteria: (getDateTimeStrokeOnSet BETWEEN "2021/01/01 00:00"

Date and hour of report data: 20220808 13 (Ymd H)
User printing report: strokeunitmetropolitan-hospitalgr

Country: Greece
Centre Id: GRMET
Output type: deathReport
User Id: strokeunitmetropolitan-hospitalgr

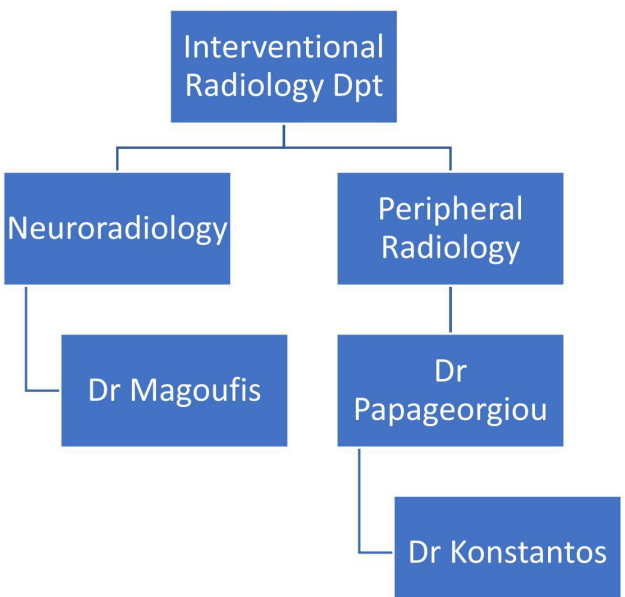
all parameters in search	parameter value
Day Interval	2021/01/01 to 2021/12/31

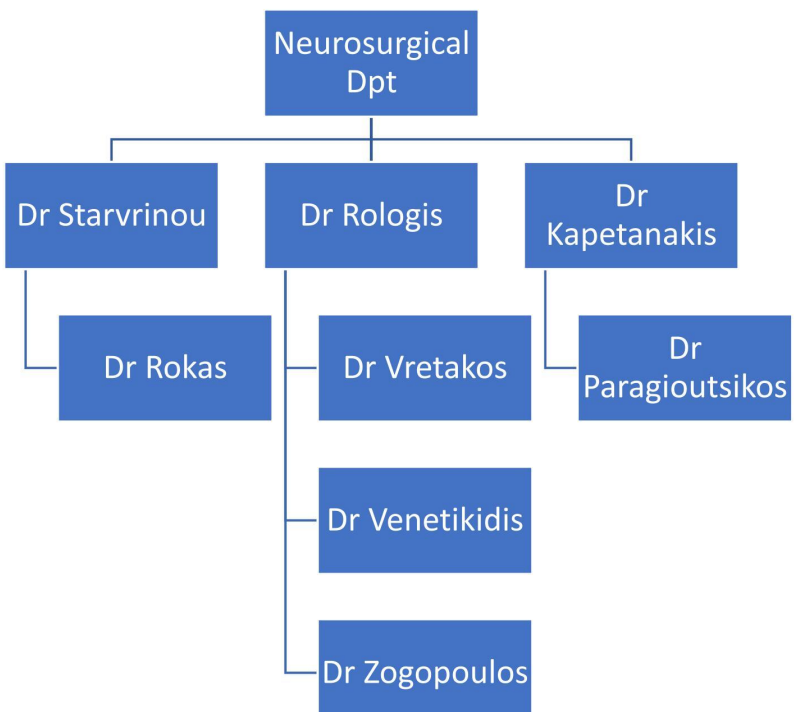
METROPOLITAN HOSPITAL	**E6 Neurosurgical and neurointerventional procedures are available on site 24/7**	**Date: 01SEP22** **Code: E.6.1** **Version: 2.0**

There is at least one Neurosurgeon 24/7
Dr Stavrinou and Dr Vretakos are regularly consulted and take part in multidisciplinary meetings

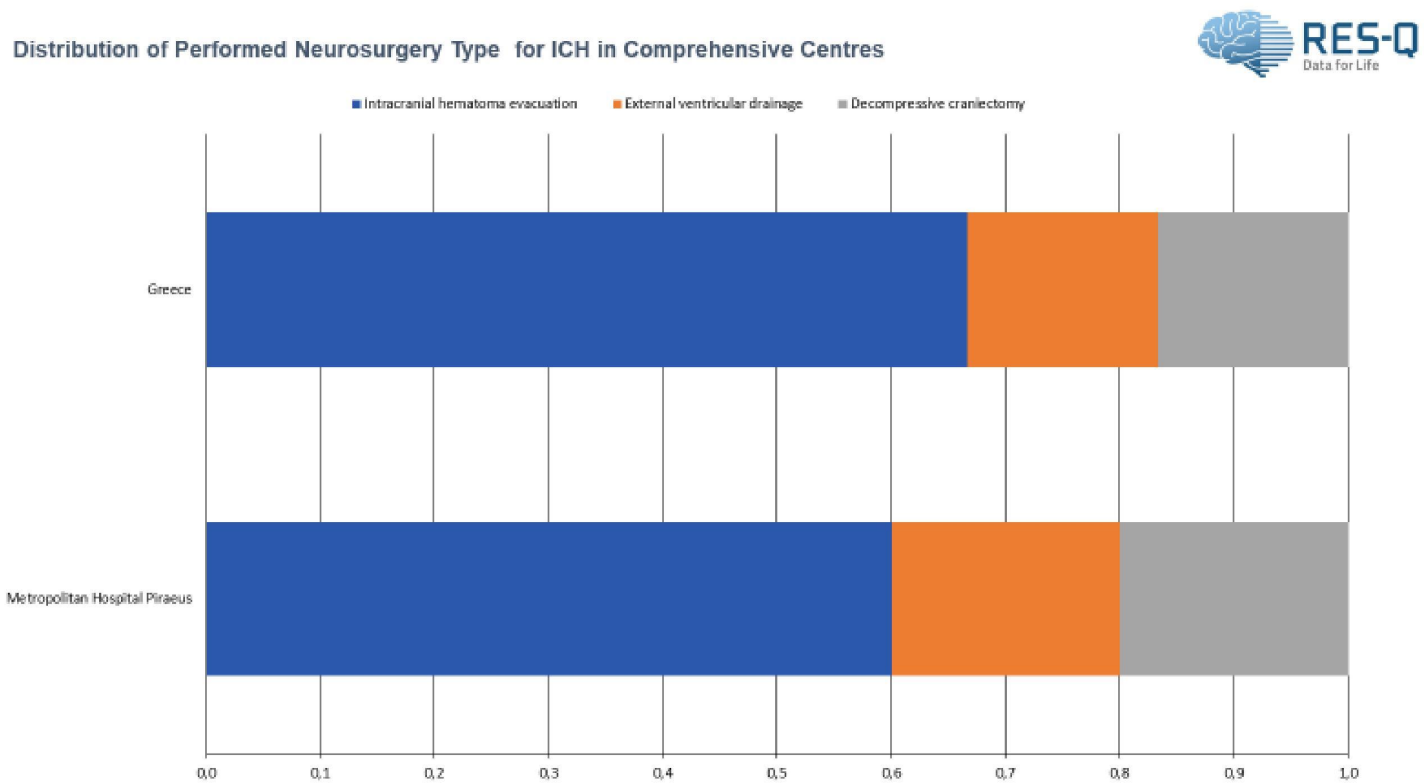
Dr Magoufis is the only interventional neuroradiologist, available 24/7. He is constantly on call for mechanical thrombectomy and he is available in less than 30 minutes after telephone call all year round. Unavailability had been less than 3 weeks during the past year (2021).

In case Dr Magoufis is absent, eligible patients for mechanical thrombectomy are transferred to **Metropolitan General Hospital**, part of the HHG group of Hospitals in which Metropolitan Hospital is also takes part, **Neurointerventional Radiologist Dr Gokas Christos**.





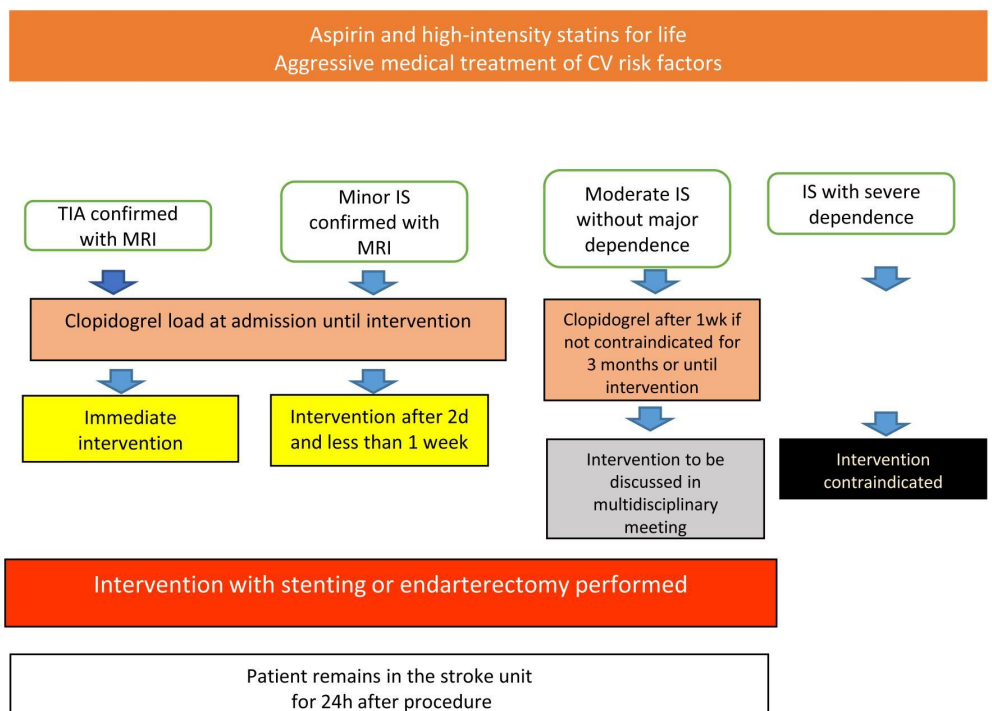
METROPOLITAN HOSPITAL	E6 Neurosurgical and neurointerventional procedures are available on site 24/7 Metrics	Date: 01SEP22 Code: E.6.2 Version: 2.0



METROPOLITAN HOSPITAL	**E7 Revascularisation of the carotid artery with endarterectomy or stenting are available on site**	**Date: 01SEP22** **Code: E.7.1** **Version: 2.0**

Most patients have both CTA and ultrasound assessment of extracranial and intracranial arteries at admission.

Algorithm for symptomatic internal carotid stenosis >50%



Multidisciplinary meeting to take place as soon as diagnosis of TIA/Stroke and carotid stenosis is confirmed

- Dr Stamboulis
- Dr Kargiotis or Dr Safouris
- Dr Magoufis
- Dr Papapavlou or Dr Bairaktaris or another vascular surgeon

Results of the meeting discussed with the patient or/and his family

METROPOLITAN HOSPITAL	**E7 Revascularisation of the carotid artery with endarterectomy or stenting are available on site** **Staff**	**Date: 01SEP22** **Code: E.7.2** **Version: 2.0**

The vascular surgeon that is our first contact is Dr Papapavlou and his assistant Dr Bairaktaris, general surgeon.

Dr Magoufis is the only neurointerventionalist in the Hospital.

He has extensive experience in diagnostic and therapeutic (aneurysm, AVM management) neuroradiology and he is actually the most experienced neurointerventionist for mechanical thrombectomy in acute ischemic stroke in Greece.

He is constantly on call for mechanical thrombectomy and he is available in less than 30 minutes after telephone call all year round. Unavailability had been less than 3 weeks during the past year (2021).

VASCULAR SURGEONS

NAME	DEPARTMENT	SPECIALTY	PHONE NUMBER
DOULAS NIKOLAOS	VASCULAR SURGEONS	Registrar, Vascular Surgeon	210 480 9910, 210 480 9503
ELEFTHERIOU GEORGIOS	VASCULAR SURGEONS	Director, Vascular Surgeon	210 48 07 021
ILIOPOULOS IOANNIS	VASCULAR SURGEONS	Director, Vascular Surgeon	210 480 9000
MARKATIS FOTIOS	VASCULAR SURGEONS	Director, Vascular Surgeon	210 480 9000
NIKOLOPOULOS EVANGELOS	VASCULAR SURGEONS	Associate Director, Vascular Surgeon	210 480 9000
PAPADAKIS KONSTANTINOS	VASCULAR SURGEONS	Director, Vascular Surgeon	210 480 7007, 210 480 7006
PAPAPAVLOU PRODROMOS	VASCULAR SURGEONS	Director, Vascular Surgeon	210 480 9853
ROKAS GEORGIOS	VASCULAR SURGEONS	Director, Vascular Surgeon	210 48 09 000
TRACHANELLIS SOFOKLIS	VASCULAR SURGEONS	Registrar, Vascular Surgeon	210 480 9000

List of vascular surgeons available online at: https://www.metropolitan-hospital.gr/en/services/general-services/surgery/team/itemlist/category/92-vascular-surgeons
CV of Dr Papapavlou available online at: https://www.metropolitan-hospital.gr/en/services/general-services/surgery/team/item/487-papapavlou-prodromos#contact

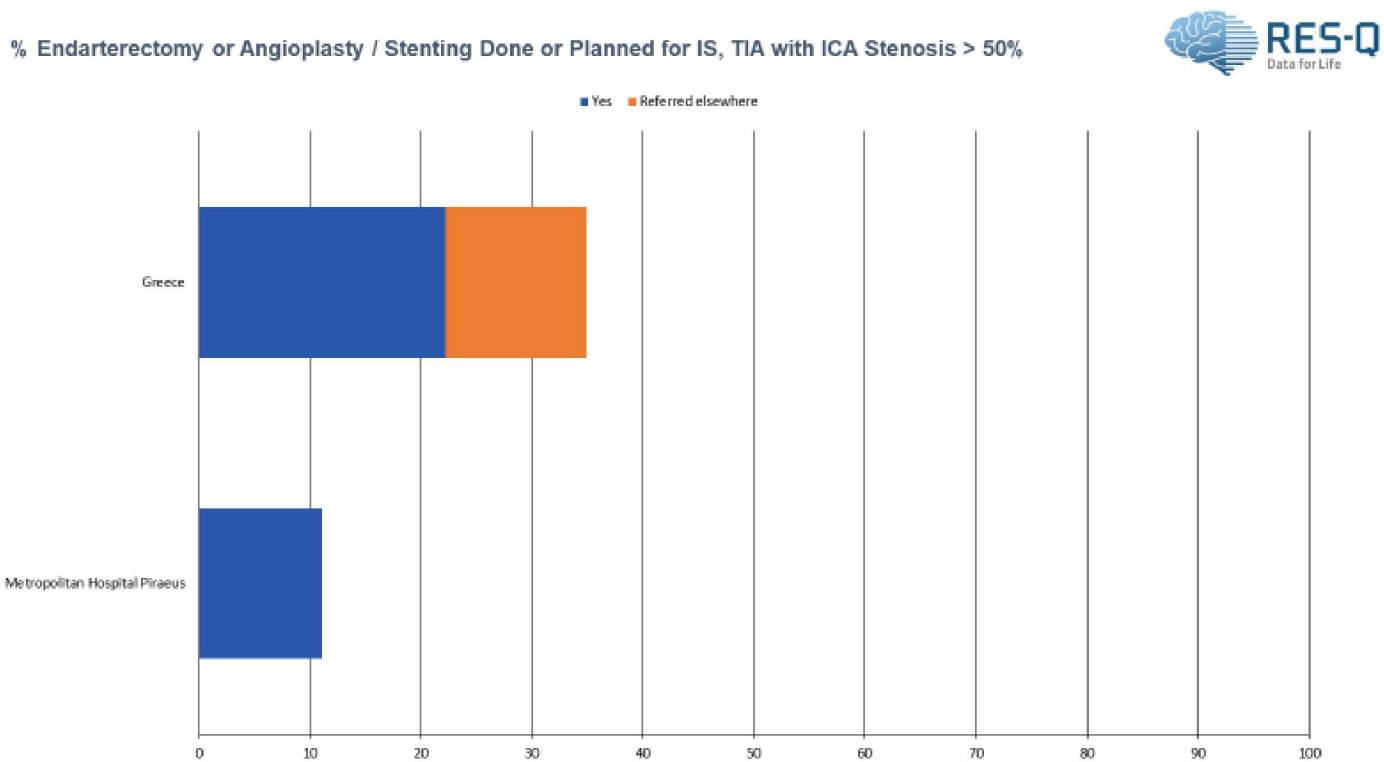
METROPOLITAN HOSPITAL	E7 Revascularisation of the carotid artery with endarterectomy or stenting are available on site	Date: 01SEP22 Code: E.7.3 Version: 2.0

RES-Q Data for Life

Greece

Data Summary Y-2021

Report was generated on July 18, 2022



METROPOLITAN HOSPITAL	**E8 The infrastructure of the stroke unit allows continuous monitoring of ECG, breathing, blood pressure, pulsoxymetry, and temperature**	**Date: 01SEP22** **Code: E.8** **Version: 2.0**

Stroke Unit: 4-bed unit (A) with monitored beds with integrated scale to measure body weight to calculate alteplase dose (B) showing real-time vital signs to the central station of the nurse.