

Praeinančių smegenų išėmijos priepuolių tarnybos organizavimas Didžiojoje Britanijoje

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[http://www.insultoasociacija.lt/index.php/
profesionalams/gydytojams](http://www.insultoasociacija.lt/index.php/profesionalams/gydytojams)



Original research article

Access to and delivery of acute ischaemic stroke treatments: A survey of national scientific societies and stroke experts in 44 European countries

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ESO ESMINT EAN SAFE Survey on Stroke Care collaborators[†]

Abstract

Introduction: Acute stroke unit care, intravenous thrombolysis and endovascular treatment significantly improve the outcome for patients with ischaemic stroke, but data on access and delivery throughout Europe are lacking. We assessed best available data on access and delivery of acute stroke unit care, intravenous thrombolysis and endovascular treatment throughout Europe.

Methods: A survey, drafted by stroke professionals (ESO, ESMINT, EAN) and a patient organisation (SAFE), was sent to national stroke societies and experts in 51 European countries (World Health Organization definition) requesting experts to provide national data on stroke unit, intravenous thrombolysis and endovascular treatment rates. We compared both pooled and individual national data per one million inhabitants and per 1000 annual incident ischaemic strokes with highest country rates. Population estimates were based on United Nations data, stroke incidences on the Global Burden of Disease Report.

Results: We obtained data from 44 European countries. The estimated mean number of stroke units was 2.9 per million inhabitants (95% CI 2.3–3.6) and 1.5 per 1000 annual incident strokes (95% CI 1.1–1.9), highest country rates were 9.2 and 5.8. Intravenous thrombolysis was provided in 42/44 countries. The estimated mean annual number of intravenous thrombolysis was 142.0 per million inhabitants (95% CI 107.4–176.7) and 72.7 per 1000 annual incident strokes (95% CI 54.2–91.2), highest country rates were 412.2 and 205.5. Endovascular treatment was provided in 40/44 countries. The estimated mean annual number of endovascular treatments was 37.1 per million inhabitants (95% CI 26.7–47.5) and 19.3 per 1000 annual incident strokes (95% CI 13.5–25.1), highest country rates were 111.5 and 55.9. Overall, 7.3% of incident ischaemic stroke patients received intravenous thrombolysis (95% CI 5.4–9.1) and 1.9% received endovascular treatment (95% CI 1.3–2.5), highest country rates were 20.6% and 5.6%.

Conclusion: We observed major inequalities in acute stroke treatment between and within 44 European countries. Our data will assist decision makers implementing tailored stroke care programmes for reducing stroke-related morbidity and mortality in Europe.

Availability of secondary prevention services after stroke in Europe: An ESO/SAFE survey of national scientific societies and stroke experts

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On behalf of the ESO-SAFE Secondary Prevention Survey
Steering Group

Abstract

Background: Recurrent stroke is associated with increased disability and cognitive impairment, but the availability of secondary prevention measures after transient ischaemic attack (TIA) or stroke in Europe is uncertain. This limits prioritisation of investment and development of national stroke strategies.

Methods: National stroke representatives throughout Europe were surveyed. Consensus panels reported national data if available, or else expert opinion, estimating the availability of each intervention by quintiles of patients, dichotomised for analysis at 60%. Countries were classified into tertiles of gross domestic product per capita.

Results: Of 50 countries, 46 responded; 14/45 (31%) had national stroke registries and 25/46 (54.3%) had national stroke strategies incorporating secondary prevention. Respondents reported that the majority of TIA patients were assessed by specialist services within 48 hours in 74.4% of countries, but in nine countries more than 20% of patients were seen after more than seven days and usually assessed by non-specialists (7/46 countries). Eighty percent of countries deferred blood pressure assessment to primary care, whilst lifestyle management programmes were commonly available in only 46% of countries. Although basic interventions were widely available, interventions frequently not available to more than 60% of patients included: ambulatory cardiac monitoring (40% countries); prescription (26%) and continuation (46%) of statins; blood pressure control at follow-up (44%); carotid endarterectomy within one month

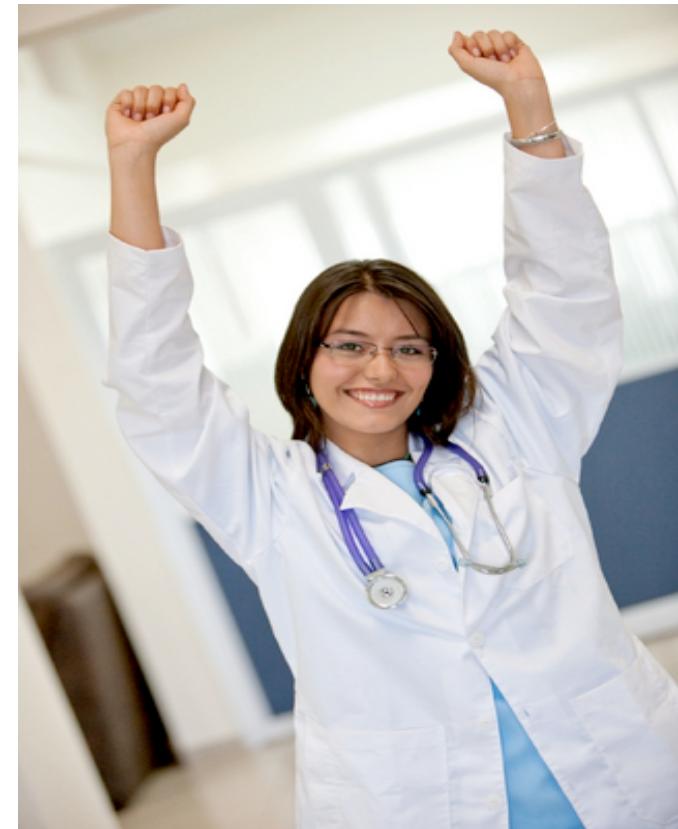
- Praeinantis smegenų išemijos priepuolis (PSIP) – galvos smegenų kraujotakos sutrikimas, sukeliantis trumpalaikius neurologinius simptomus.
- Teoriškai simptomai trunka iki 24 val.
- Praktiškai neurologinė simptomatika regresuoja per 10 – 15 min.

**Ar visada galime ploti
rankomis?**

Krūtinės angina -> Miokardo infarktas

PSIP -> Galvos smegenų infarktas

Valio! Simptomai išnyko!





Stroke and transient ischaemic attack in over 16s: diagnosis and initial management

Clinical guideline

Published: 23 July 2008

nice.org.uk/guidance/cg68

NICE algoritmas

- Visi pacientai su įtariamu PSIP'u turi būti pakonsultuoti skubos tvarka, atsižvelgiant į insulto riziką (ABCD2 skalė)

‘One Stop TIA Clinic’

ABCD2 skalē

Age	
≥ 60 years	1
Blood pressure	
Systolic BP ≥ 140 mm Hg OR Diastolic BP ≥ 90 mm Hg	1
Clinical features of TIA (choose one)	
Unilateral weakness with or without speech impairment OR	2
Speech impairment without unilateral weakness	1
Duration	
TIA duration ≥ 60 minutes	2
TIA duration 10-59 minutes	1
Diabetes	1

ABCD² skalė ir insulto rizika

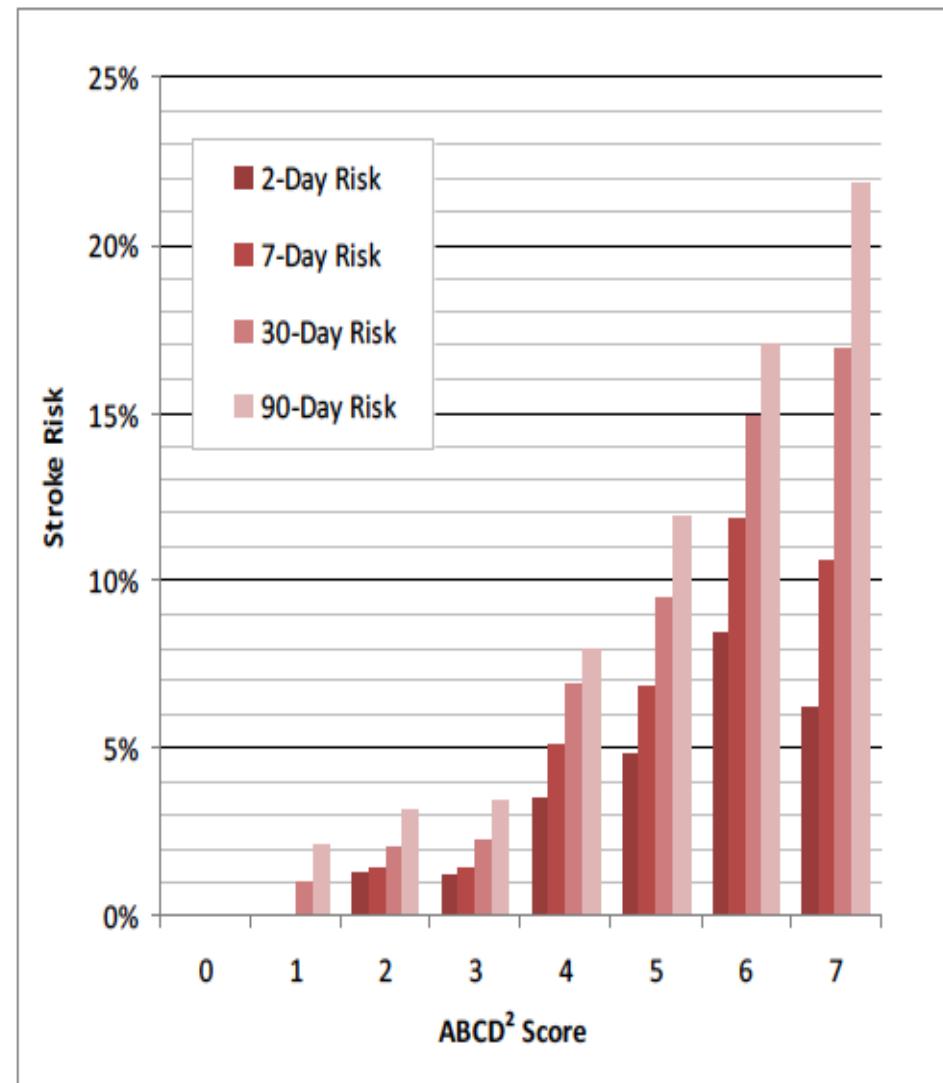
- Didelės rizikos PSIP ≥ 4
Konsultacija - 24 val.
- Mažos rizikos PSIP ≤ 3
Konsultacija - 7 dienas

Ženkliai didina riziką!!!

Crescendo tipo PSIP

Prieširdžių virpėjimas

>50% VMA stenozė



Johnston SC et al. Lancet 2007; 369:283-92

PSIP ištyrimas ir gydymas

Kodėl pacientas su PSIP' u turėtų būti skubiai tyriamas ir gydomas?

- Sumažina insulto riziką 80%
- Sumažina lovadienų skaičių insultų sk.
- Sumažina išlaidas insultų gydymui
- Sumažina pacientų invalidizaciją

Lavallee PC et al. Lancet Neurol 2007; 6:953-60

Luengo-Fernandez R et al. Lancet Neurol 2009; 8:235-43

Rothwell PM et al. Lancet 2007; 370:1432-42

Jei pacientui įtariamas insultas (NICE):

- Simptomai išlieka -> priėmimo sk.
- Simptomai regresavo (įtariamas PSIP'as):
 - Aspirinas 300mg
 - Siunčiamas į PSIP tarnybą

Kaip tai atrodo praktiškai?

- PSIP tarnyba dirba 7 dienas per savaitę
- Insultų sk. atskiras kabinetas (gydytojo kabinetas) – RATIA
(rapid access TIA office)
 - EKG
 - Faksas
 - Kompiuteris
- Poliklinikoje atskiras insultų kabinetas

Siuntimas

- ‘Standartinė’ forma (intranetas)
- Faksas arba elektroninis paštas
- Pacientas informuojamas:
 - Paskambins dėl atvykimo laiko
 - Pacientas tesigiai regisruojamas konsultacijai (priėmimo sk.)

TIA Referral Proforma for GPs

Patient Details:

Name: _____

Address: _____

NHS

No: _____

Sex: Date of Birth: _____

Postcode: _____

**IMPORTANT - telephone number(s) for the next 72 hours,
these MUST be verified:**

Home: _____
Mobile: _____

Details of Referring GP:

GP Name: _____

Practice Address: _____

Practice Telephone: _____

Practice Postcode: _____

Symptom Onset Date & Time:		
-------------------------------	--	--

GP Appointment Date & Time:		
--------------------------------	--	--

Presenting Complaint (patient must have experienced at least one of the following symptoms):

- speech disturbance
- amaurosis fugax or hemianopia
- Face / arm / Leg / weakness
- Loss of co-ordination
- MORE THAN ONE of dysarthria, vertigo, diplopia.

Please give clinical details:

- PLEASE ESTABLISH IF SYMPTOMS WERE:**
- Focal neurology/monocular rather than global
 - Sudden in onset
 - Maximum at onset rather than spreading or stuttering
 - Negative rather than positive (loss of function, numbness rather than paraesthesia due to migraine/seizure)
- IF YES TO ALL 4 QUESTIONS THEN TIA IS LIKELY**

Vascular Risk Factors:

- Previous TIA/Stroke
- Diabetes
- Hypertension
- Heart Disease
- Congestive Heart Failure
- Atrial Fibrillation

Please give details of any other PMH:

ABCD² Score:

Age	Age > 60	1	<input type="checkbox"/>
BP	Systolic > 140	1	<input type="checkbox"/>
	Dystolic > 90	1	<input type="checkbox"/>
Clinical	Other, no weakness	0	<input type="checkbox"/>
	Speech disturbance only	1	<input type="checkbox"/>
	Unilateral weakness	2	<input type="checkbox"/>
Duration	< 10 minutes	0	<input type="checkbox"/>
	> 10 and < 59 minutes	1	<input type="checkbox"/>
	> 60 minutes	2	<input type="checkbox"/>
Diabetic	Yes	1	<input type="checkbox"/>
ABCD² Score:			

Aspirin Given
Date & Time:

Treat as High Risk TIA if
More than 1 TIA within one week
Or atrial fibrillation or on anticoagulants



Presenting Complaint (patient must have experienced at least one of the following symptoms):

- speech disturbance
- amaurosis fugax or hemianopia **Select Side**
- Face / arm / Leg / weakness **Select Side**
- Loss of co-ordination
- MORE THAN ONE of dysarthria, vertigo, diplopia.

Please give clinical details:

PLEASE ESTABLISH IF SYMPTOMS WERE:

- Focal** neurology/monocular rather than global
- Sudden** in onset
- Maximum** at onset rather than spreading or stuttering
- Negative** rather than positive (loss of function, numbness rather than paraesthesia due to migraine/seizure)

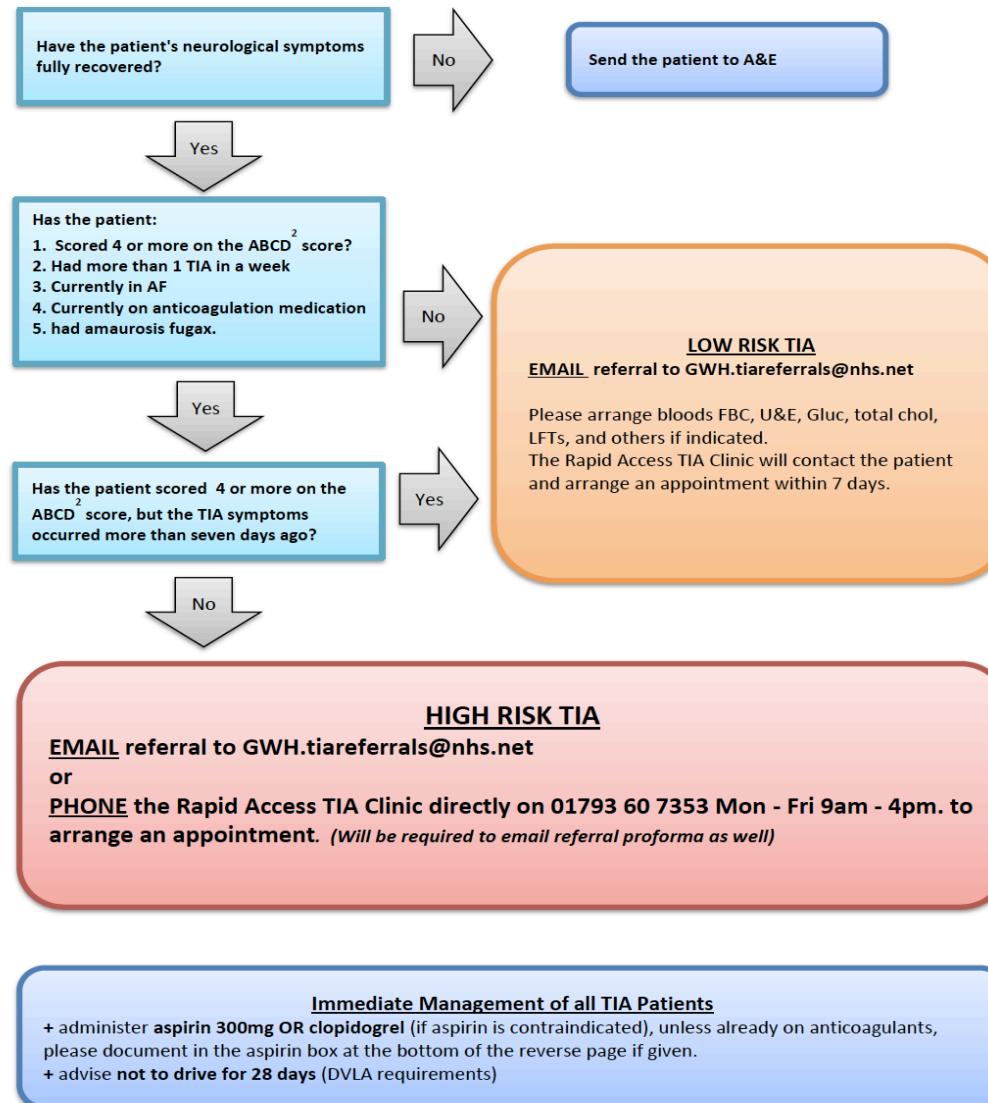
IF YES TO ALL 4 QUESTIONS THEN TIA IS LIKELY

TIA Referral Pathway for GPs

Great Western Hospitals **NHS**
NHS Foundation Trust

A TIA will have focal neurological symptoms that have completely resolved in less than 24 hours.

Non-focal neurological symptoms on their own such as loss of consciousness, light headedness/faintness/dizziness, total body weakness or fatigue, or drop attacks should not be interpreted as TIA. Please refer to General Syncope Clinic or Neurology Clinic.



Siuntimas

‘Standartinė’ forma
(intranetas)

- Faksas
- Elektroninis paštas

BPG

Pacientas informuojamas
dėl konsultacijos

Priėmimo sk.

Kviečia ‘Insultų
Specialistą’ (9-17val)

Paskiriamas konsultacijos
laikas (17-9val, savaitgalis)

Priėmimo sk. (savaitgaliais ir ne darbo valandomis)

- Būklė įvertinama gydytojo
- EKG
- ‘Standartiniai kraujo tyrimai’
- Galvos KT
- Aspirinas 300mg
- Pacientui paskiriamas laikas konsultacijai PSIP tarnyboje

PSIP tarnyba (siuntimas)

- 8.30 – 9.00 val. gydytojas įvertina (triage) siuntimus:
 - ‘Didelės rizikos PSIP’
 - ‘Mažos rizikos PSIP’
 - Atmetamas (nurodoma priežastis)
- Specializuota Insulto Slaugytoja (Stroke Nurse) arba Insultų sk administratorė paskambina pacientui ir paskiria konsultacijos laiką

Great Western Hospital

(District General Hospital)

Insultų tarnyba – 400.000 gyventojų

- 2 Consultant in Neurology or Stroke Medicine
- 1-2 rezidentai (Neurologija arba Geriatrija)
- 2 ‘bendriniai’ rezidentai
- 1 Specializuota Insulto Slaugytoja (Stroke Nurse)
- 1 Insultų tarnybos administratorė
- Insultų sk. (18 lovų)
- Konsultacijos kt. skyriuose
- Trombolizės
- PSIP tarnyba

Konsultacija PSIP tarnyboje

Jei PSIP arba įtariamas PSIP

- EKG
- Kraujo tyrimas
- Galvos KT
- Kaklo kraujagyslių ultragarsinis tyrimas
- Jei EKG sinusinis ritmas -> 7 dienų monitoravimas dėl paroksizminio prieširdžių virpėjimo
- Jei kaklo kraujagyslių ultragarsas nustato sunkaus laispnio VMA stenozę -> siuntimas angiochirurgui

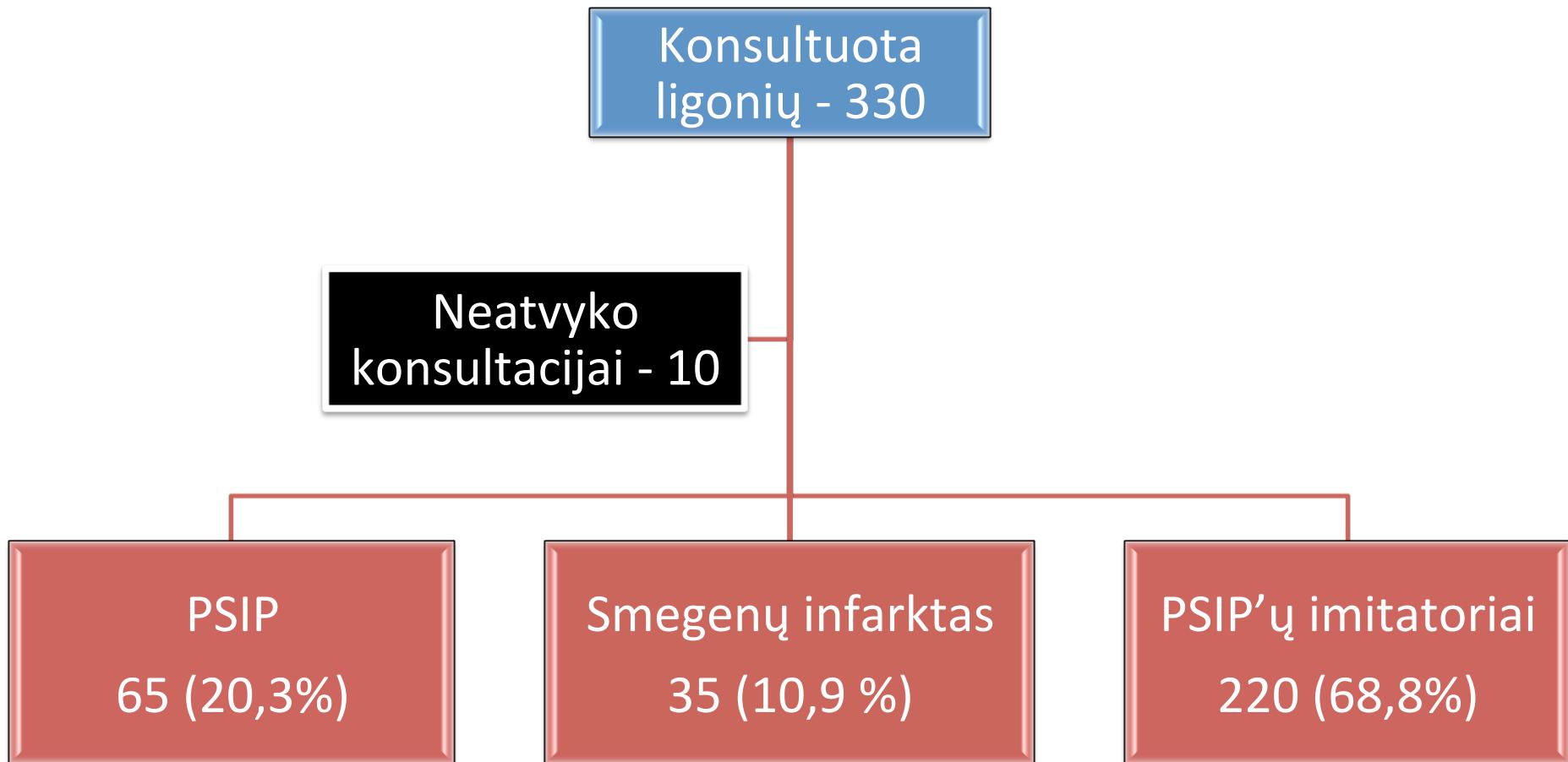
Konsultacija PSIP tarnyboje

Rekomendacijos

1. Antiagregantai arba antikoagulantai (NOAK)
2. Statinai
3. Vaistai mažinantys spaudimą
4. Rūkymas
5. Judėjimas
6. Dieta
7. DVLA vairavimas

PSIP tarnyba

(autoriaus neskelbti duomenys)

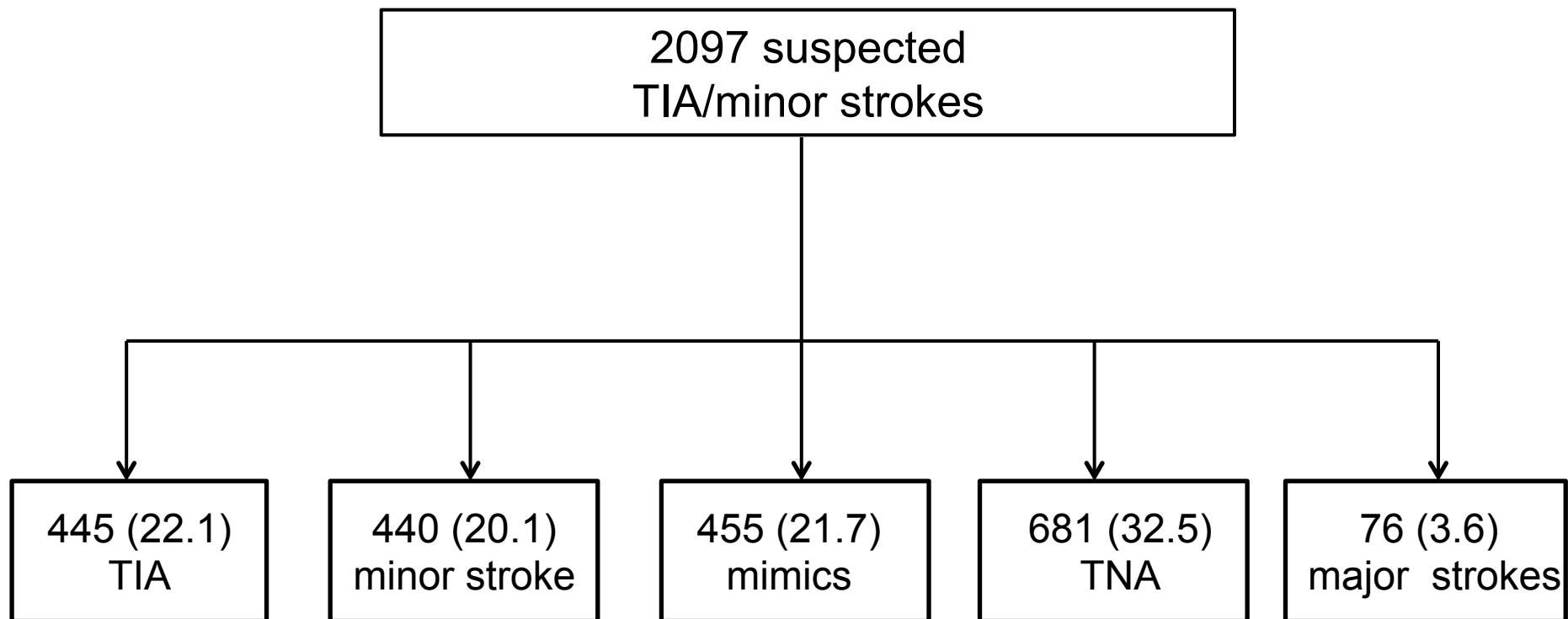


PSIP'ų imitatoriai (N=220)

- Migrena/galvos sk. – 85 (38,6%)
- Ne specifiniai simpt. – 29 (13,2%)
- ‘Funkciniai simpt.’ – 19 (8,6%)
- Traukuliai/sinkopė – 17 (7,7%)
- Streso sukelti simpt. – 10 (4,5%)
- Išsétinė sklerozė/demieliniz. susirgimai – 7 (3,2%)
- AKS ‘svyravimai’ – 7 (3,2%)
- Kompresinės neurop. – 5 (2,3%)
- Svaigimai – 5 (2,3%)
- Akių ligos – 5 (2,3%)
- Lėtinis skausmas – 5 (2,3%)
- Demencija/PD – 5 (2,3%)
- Praeinanti globalinė amnezija – 2
- Smegenų navikai - 2

TIA mimics and chameleons: what a TIA physician needs to know

Suspected TIA/minor strokes in the first 10 years of OXVASC



TIA mimics and chameleons: what a TIA physician needs to know

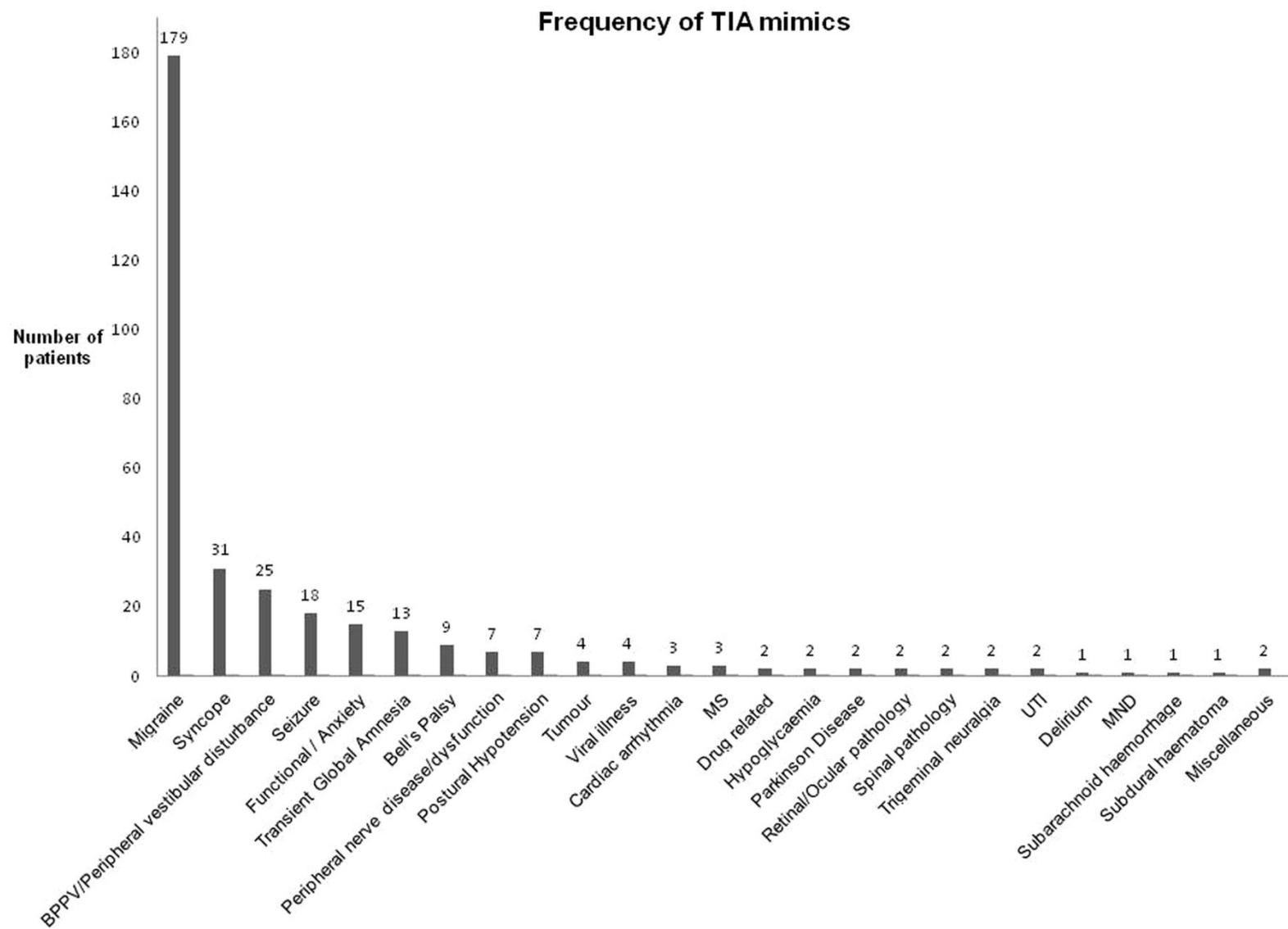
Neurological mimics n=322

Neurological mimics diagnosis	n	Neurological mimics diagnosis (cont)	n
Migraine aura	66	Headache without focal symptoms	4
Brain tumour or brain metastasis	43	Myasthenia gravis and Eaton Lambert syndrome	4
Seizure	39	Motor neuron disease	4
Peripheral nerve involvement	33	Reversible cerebral vasoconstriction syndrome	2
Microvascular cranial nerve lesion	28		
Transient global amnesia	25	Temporal arthritis	1
Multiple sclerosis/other demyelinating disorders	17	Tolosa-Hunt syndrome	1
Parkinson/other movement disorders	15	Neurosarcoidosis	1
Dementia	14	Traumatic cortical haemorrhage	1
Subdural haematoma	9	Brain mycotic aneurysm	1
Myelopathy	8		
Bell's palsy	5	Brain arteriovenous malformation	1

Non-neurological mimics (n=133)

Non neurological non-ocular diagnosis	n	Ocular diseases	N=7
Syncope/pre-syncope	49	Retinal detachment	2
Functional	22	Progressive visual loss	2
BPPV/ other vestibular peripheral dysfunction	20	Retinal vein occlusion	1
Alcohol and drugs related	9	Orbital haematoma	1
Limb pain	6	Vitreous detachment	1
Osteoarthritis	4		
Sepsis	3		
Depression	3		
Isolated tinnitus	2		
Mechanical fall	2		
Subclavian steal syndrome	1		
Acute peripheral embolism	1		
Progressive hearing loss	1		
Knee effusion	1		
Obstructive sleep apnoea	1		
Extra-adrenal paraganglioma	1		

Frequency of transient ischaemic attack (TIA) mimics (338) from 1532 consecutive suspected TIA referrals to the University College London comprehensive stroke service.



Monitoravimas dėl prieširdžių virpėjimo

- PV ženkliai padidina insulto riziką, todėl tik EKG nepakanka
- 2013m. auditas '72h Holterio monitoravimas po smegenų išemijos'

**10% nustatyta parok. PV ir skirti
antikoagulantai**

Auditas

Month/Quarter/Year	Apr-14	Jul-14	Oct-14	Jan-15
High Risk TIA Patients	40	48	48	71
Low Risk TIA Patients	94	88	100	113
High Risk TIA & Less Than 24 Hours	72.50%	60.42%	87.50%	90.14%
Numerator (All/Appointment)	29	29	42	64
Denominator (All/Appointment)	40	48	48	71
Unknown	0	0	0	0
Other	0	0	1	0
Transport Delay - Private Transport	0	0	0	0
Transport Delay - Hospital Transport	0	0	0	0
Service Delay - Weekend Referral	7	11	1	0
Service Delay - Radiology	0	0	0	1
Service Delay - Preferred Consultant (NEW)	0	1	0	1
Service Delay - Consultant Availability	0	0	0	0
Service Delay - Appointment Availability	0	2	1	0
Delayed TIA Referral - SWAS (NEW)	1	0	1	0
Delayed TIA Referral - GP	3	3	1	2
Delayed TIA Referral - A&E	0	2	1	2
Low Risk TIA & Less Than 7 Days	92.55%	94.32%	96.00%	92.92%
Numerator (All/Appointment)	87	83	96	105
Denominator (All/Appointment)	94	88	100	113

Mielai atsakysiu į klausimus!

