

“BE FAST” - Spot a Stroke be “FAST”
Seminar Keperawatan Nasional 2023

STROKE & Code S ALGORITHM

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EPIDEMIOLOGI

- Tahun : 795.000 penduduk mengalami stroke baru (serangan pertama sekitar 610.000 dan 185.000 sebagai serangan berulang)
- **Prevalensi :**
 - 87 % stroke iskemik
 - 10 % stroke perdarahan intraserebral
 - 3 % perdarahan SAH
- Angka kematian stroke di Asia lebih tinggi dibanding Amerika
- Asia tenggara , Indonesia memiliki angka **mortalitas** stroke tertinggi sekitar 193,3 /100.000 penduduk tahun.
- Berdasarkan RISKESDAS (Riset Kesehatan Dasar) Kementerian Kesehatan 2018 : 10,9 orang per mil per tahun mengalami stroke

OPPORTUNITIES FOR STROKE RECOVERY HAVE NEVER BEEN GREATER

UPDATED GUIDELINES EMPHASIZE IMPORTANCE OF QUICK ACTION

About

795,000

Americans will have a new or recurrent stroke this year.



More than

690,000

U.S. strokes are caused when a clot cuts off blood flow to a part of the brain. (called an ischemic stroke).

Stroke is the No. 5 cause of death in the United States, killing more than 142,000.¹

1 in 19 DEATHS



QUICK TREATMENT = LESS BRAIN DAMAGE!
Importance of Getting to the Hospital Quickly



Get to the hospital at the first sign of stroke so you can be evaluated and receive treatment in time. Stroke treatment begins in the ambulance. Calling 9-1-1 can help patients get treated more quickly and get them to a hospital that specializes in stroke care.

AS SOON AS POSSIBLE
WITHIN **4.5 HOURS**
in select patients

IV alteplase

AS SOON AS POSSIBLE WITHIN
UP TO **24 HOURS**
AFTER STROKE BEGINS¹
in select patients

mechanical thrombectomy

Clot busters and clot-removal procedures must be administered within a few hours of stroke symptoms to lessen the chance of being disabled after a stroke.

Mechanical thrombectomy is a procedure that can physically remove a large blood clot from a blocked artery in the brain.

9-1-1

Call 9-1-1 at the first sign of stroke.

LEARN AND SHARE THE WARNING SIGNS OF STROKE

Spot a Stroke F.A.S.T.

F

FACE DROOPING

Does one side of the face droop or is it numb?

A

ARM WEAKNESS

Is one arm weak or numb?

S

SPEECH DIFFICULTY

Is speech slurred, are they unable to speak, or are they hard to understand?

T

TIME TO CALL 9-1-1

If the person shows any of these symptoms, even if the symptoms go away, call 9-1-1 and get to the hospital immediately.

Insiden

Kematian no 2 di dunia,
setelah penyakit jantung
koroner

Insiden stroke tiap tahun
17 juta per tahun

Penyebab ketiga disabilitas
dan penurunan mobilitas
diatas usia 65 thn

Beban ekonomi meningkat
(menurunnya
produktivitas)

80 %

• Infark serebri

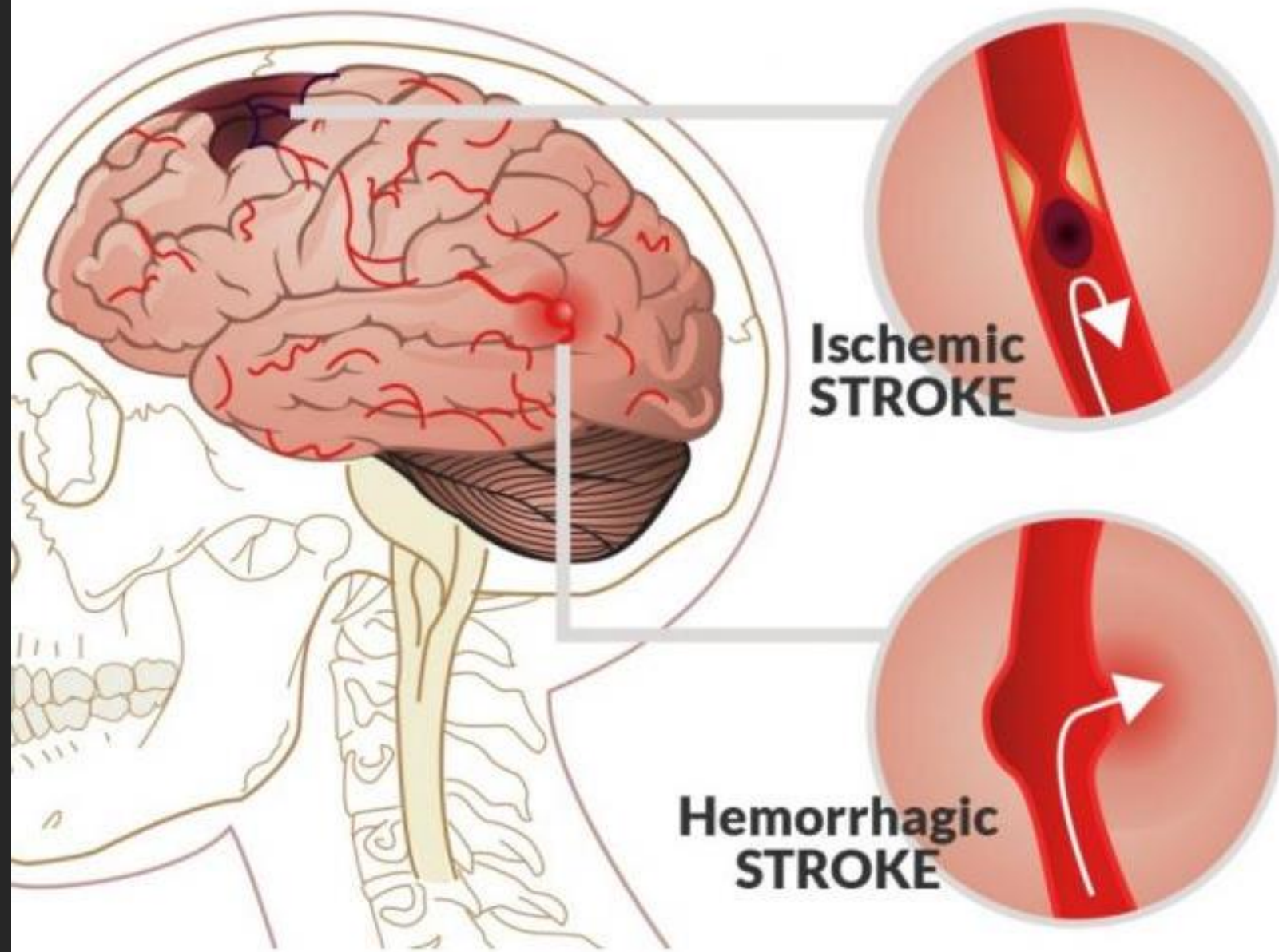
15 %

• ICH Primer

15 %

• SAH

JENIS STROKE



BRAIN **STROKE**

Hemorrhagic Stroke


Weakened/diseased
blood vessels
rupture.

Blood leaks into
brain tissue

Ischemic Stroke


Blood clots stop the
flow of blood to an area
of the brain

STROKE SUMBATAN



Blood clot lodges in cerebral artery, causing a stroke

The diagram shows a cross-section of a cerebral artery with a red blood clot (thrombus) partially blocking the lumen. A circular inset from the brain above shows the location of this artery.



Blood clot breaks off and travels

The diagram shows a yellowish-orange blood clot (embolus) breaking away from a larger mass in a diseased carotid artery. A circular inset from the brain above shows the path of the clot.

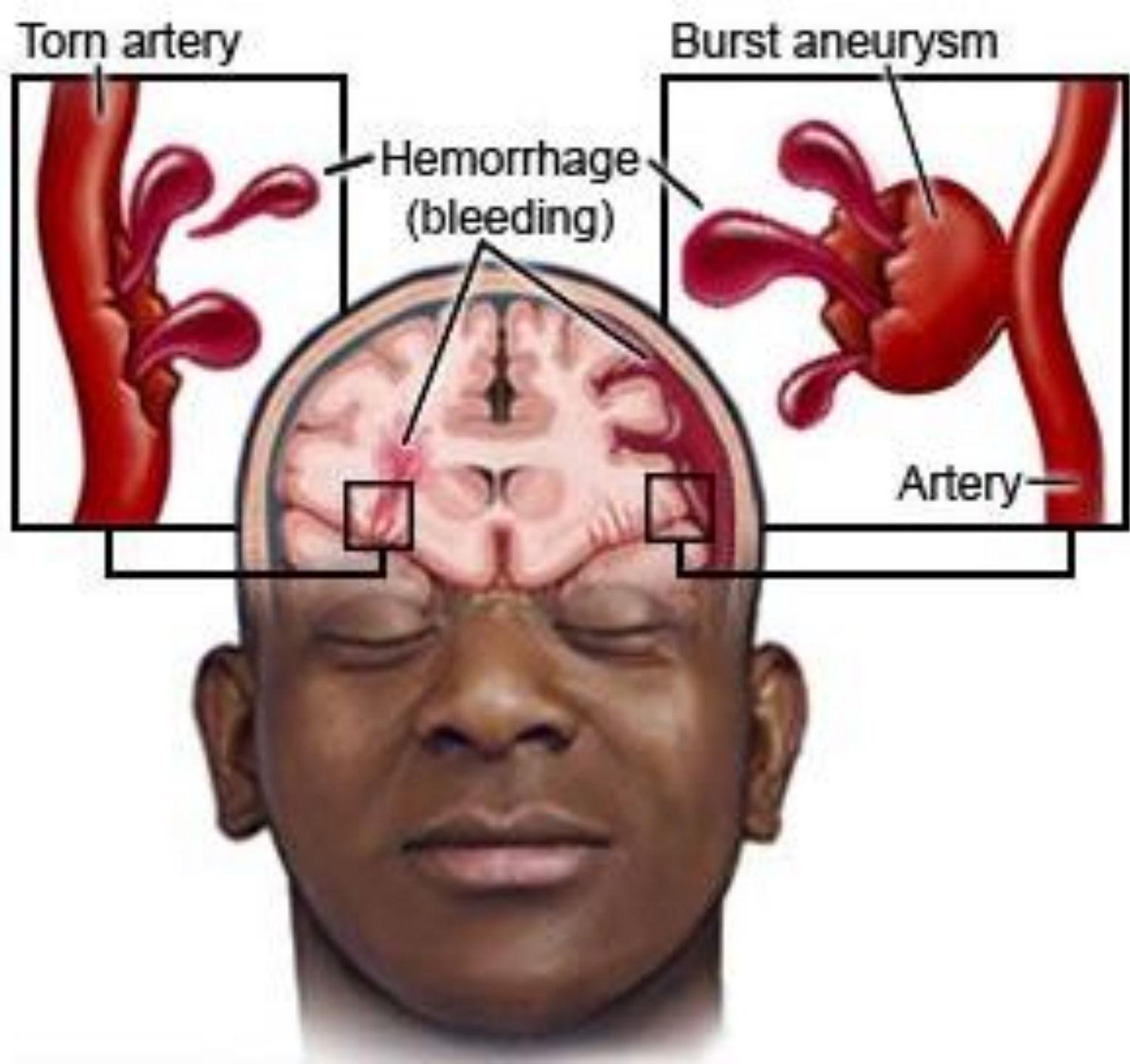
Diseased carotid artery

The diagram shows a cross-section of a carotid artery with a significant narrowing of the lumen due to atherosclerotic plaque. A circular inset from the neck below shows a normal carotid artery for comparison.

Normal carotid artery

The diagram shows a cross-section of a normal carotid artery with a wide, clear lumen. A circular inset from the neck below shows the normal carotid artery for comparison.

STROKE PERDARAHAN



STROKE

Trombotik

- Serangan saat istirahat
- Fokal—memberat
- HT
- Arterosklerotik jantung, p.d
- Ct scan area hipodense

Emboli

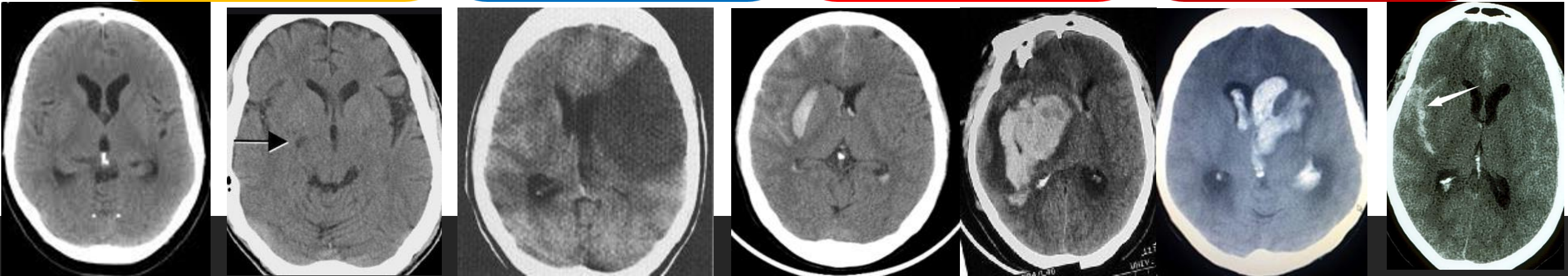
- Serangan saat aktivitas
- Fokal → mak
- Normotensi
- AF, Katub, bising caritis
- Ct scan : hipodense (wedge shape) → TPI

ICH

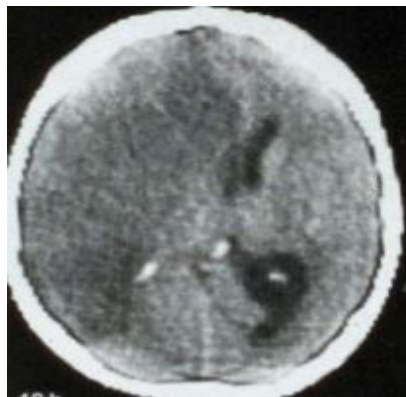
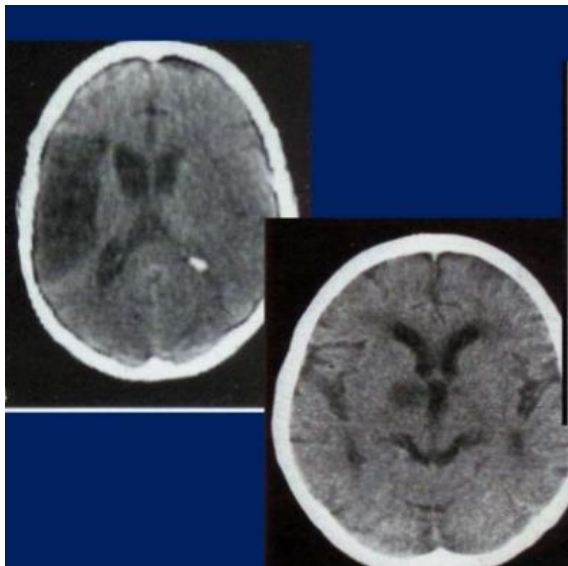
- aktivitas
- Fokal, tanda TIK (nyeri kepala, muntah, bradikardi, Hipertensi, bradypnea, papil edema)
- Retinopati hipertensi
- Ct : area hiperdense

SAH

- Saat aktivitas
- Nyeri kepala thunderclap headache
- Hipertensi±
- Pendarahan subhialoid
- CT : hiperdense di area sisterna basalis



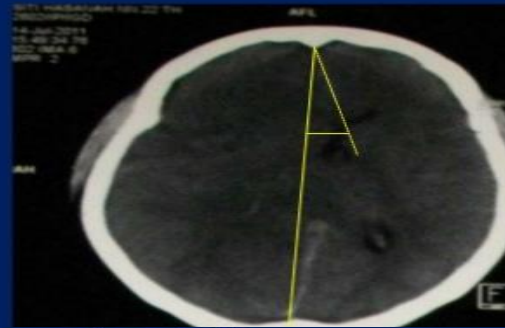
Stroke Iskemik



Tekanan Intra Kranial Meningkat

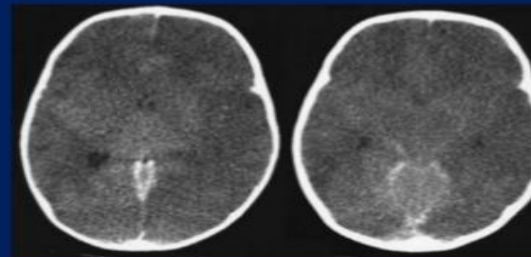
Midline shift

- Pergeseran dari garis tengah diukur berdasarkan posisi septum pelusidum akibat pendorongan massa hematoma dan edema serebri
- Menunjukkan adanya potensi herniasi



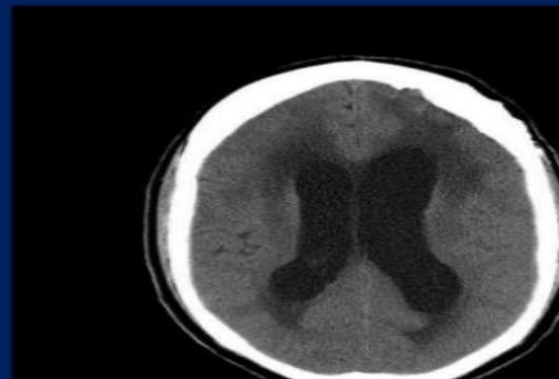
Edema Cerebri Difus

- Sulkus gyrus menghilang
- Batas gray matter dan white matter kabur atau hilang
- Ventrikel menyempit,
- Gambaran sisterna quadrigemina menyempit atau menghilang



Hidrosefalus

- Ukuran ventrikel melebar
- Ujung tumpul
- Bila terdapat area hipodens pada kornu ventrikel lateralis menunjukkan proses sedang akut



– Efek massa

- Midline shift
- Kompresi ventrikel
- Hidrosefalus non komunikans
- Edema serebri

Stroke Haemorrhagik :

ICH

– Lokasi

- Lobar, basal ganglia, thalamus, brainstem, serebellum, intraventrikular, subarachnoid
- Bila lobar hitung jarak terdekat dari kalvaria

– Volume

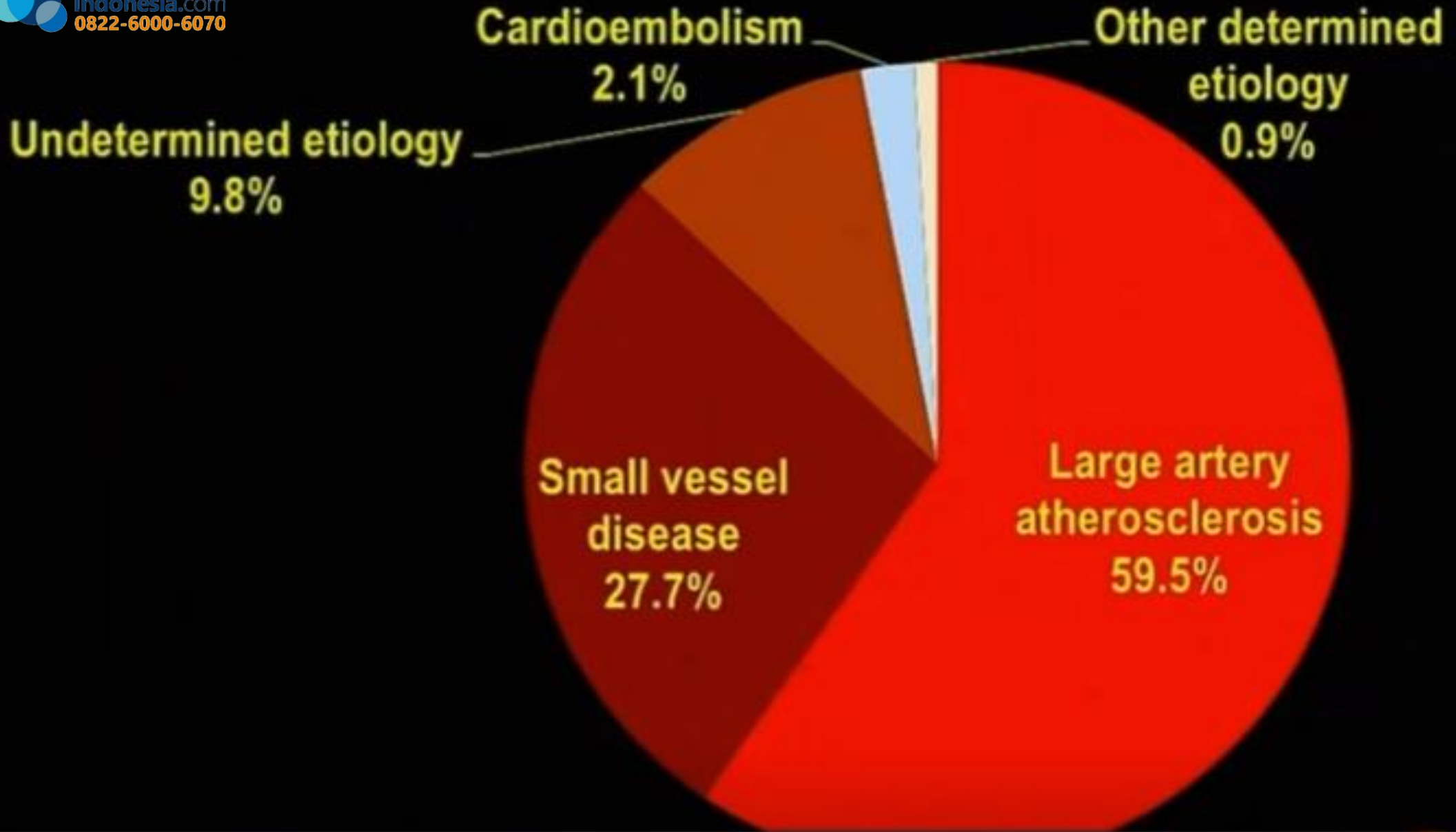
- Dihitung dengan rumus Broderick

$$(P \times l \times \text{jumlah irisan yang +}) / 2$$

Untuk irisan setebal 1 cm, bila 0,5 cm maka dibagi empat



- Lesi hiperdens di lobus oksipital kiri
- Volume $2 \times 3 \times 4 / 2 = 12 \text{ cc}$
- Jarak dari calvaria < 1 cm



DETEKSI DINI

LEARN THE SIGNS FAST



Face
Drooping



Arm
Weakness



Speech
Difficulty



Time to
Call 9-1-1

B

E

F

A

S

T



BALANCE

LOSS OF BALANCE,
HEADACHE
OR DIZZINESS

EYES

BLURRED VISION

FACE

ONE SIDE OF THE
FACE IS DROOPING

ARMS

ARM OR LEG
WEAKNESS

SPEECH

SPEECH DIFFICULTY

TIME

TIME TO CALL
FOR AMBULANCE
IMMEDIATELY

TIPS MUDAH MENGENALI GEJALA DAN TANDA-TANDA STROKE



Ingat Slogan

SeGeRa Ke RS



Senyum tidak simetris (mencong ke satu sisi), mersedak, sulit menelan air minum secara tiba-tiba

Se



Gerak separuh anggota tubuh melemah tiba-tiba

Ge



Ra bicaRa pelo / tiba-tiba tidak dapat bicara / tidak mengerti kata-kata / bicara tidak nyambung

Ra



Kebas atau baal, atau kesemutan separuh tubuh

Ke



Rabun, pandangan satu mata kabur, terjadi tiba-tiba

R



Sakit kepala hebat yang muncul tiba-tiba dan tidak pernah dirasakan sebelumnya, Gangguan fungsi keseimbangan, seperti terasa berputar, gerakan sulit dikoordinasi.

S

CODE STROKE

Penanganan Stroke Prahospital

Unit gawat darurat - pada fasilitas prahospital



FACE DROOPING



ARM WEAKNESS



SPEECH DIFFICULTY



TIME TO CALL

Deteksi

1. **Stroke** atau **TIA**
2. Keluhan : hemiparesis, gangguan sensorik satu sisi tubuh, hemianopia atau buta mendadak, diplopia, vertigo, afasia, disfagia, disatria, ataksia, kejang atau penurunan kesadaran
3. secara mendadak - catat onset kejadian

Pengiriman

Ambulans gawat darurat **fasilitas yang tepat** untuk penanganan stroke

Transportasi/ ambulans

1. Personil yang terlatih
2. Mesin EKG
3. Peralatan, obat resusitasi
4. Obat neuroprotektan
5. Telemedicine
6. Peralatan gawat darurat : pemeriksaan glukosa , kadar saturasi O₂ (pulse oximeter)

Personil pada ambulans gawat darurat

1. tanda-tanda vital Tindakan stabilisasi dan resusitasi (ABC)
2. Intubasi (koma yang dalam, hipoventilasi & aspirasi.
3. kardiopulmuner stabil, px diposisikan setengah duduk .
Memeriksa dan menilai gejala dan tanda stroke
4. Pemasangan intravena
5. O₂ : saturasi > 95%
6. kadar gula darah
7. hubungi unit gawat darurat
8. Transportasi secepatnya

Time is brain

PEMERIKSAAN KLINIS

National Institutes of Health Stroke Scale

Score = 0 No stroke
Score = 1-4 Minor stroke

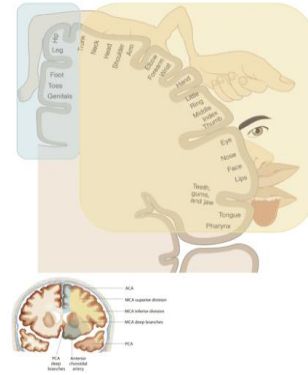
Score = 5-15 Moderate stroke
Score = 15-20 Moderate to severe stroke
Score = 21-42 Severe stroke

National Institutes of Health Stroke Scale score	
1a. Level of consciousness	0 = Alert; keenly responsive 1 = Not alert, but arousable by minor stimulation 2 = Not alert; requires repeated stimulation 3 = Unresponsive or responds only with reflex
1b. Level of consciousness questions: What is the month? What is your age?	0 = Answers two questions correctly 1 = Answers one question correctly 2 = Answers neither question correctly
1c. Level of consciousness commands: Open and close your eyes. Grip and release your hand.	0 = Performs both tasks correctly 1 = Performs one task correctly 2 = Performs neither task correctly
2. Best gaze	0 = Normal 1 = Partial gaze palsy 2 = Forced deviation
3. Visual	0 = No visual loss 1 = Partial hemianopia 2 = Complete hemianopia 3 = Bilateral hemianopia
4. Facial palsy	0 = Normal symmetric movements 1 = Minor paralysis 2 = Partial paralysis 3 = Complete paralysis of one or both sides
5. Motor arm 5a. Left arm 5b. Right arm	0 = No drift 1 = Drift 2 = Some effort against gravity 3 = No effort against gravity; limb falls 4 = No movement
6. Motor leg 6a. Left leg 6b. Right leg	0 = No drift 1 = Drift 2 = Some effort against gravity 3 = No effort against gravity 4 = No movement
7. Limb ataxia	0 = Absent 1 = Present in one limb 2 = Present in two limbs
8. Sensory	0 = Normal; no sensory loss 1 = Mild-to-moderate sensory loss 2 = Severe to total sensory loss
9. Best language	0 = No aphasia; normal 1 = Mild to moderate aphasia 2 = Severe aphasia 3 = Mute, global aphasia
10. Dysarthria	0 = Normal 1 = Mild to moderate dysarthria 2 = Severe dysarthria
11. Extinction and inattention	0 = No abnormality 1 = Visual, tactile, auditory, spatial, or personal inattention 2 = Profound hemi-inattention or extinction

Total score = 0-42

LARIO Score Large Artery Intracranial Occlusion

Item	Score
FACIAL PALSY	
Normal	0
Present	1
ARM WEAKNESS	
No drift	0
Drift or no effort against gravity or no movement	1
GRIP STRENGTH	
Normal	0
Reduced or absent	1
LANGUAGE	
Normal	0
Changes or global aphasia, or mute	1
NEGLECT	
Absent	0
Extinction to bilateral simultaneous stimulation in one or more sensory	1
Modality or an unrecognized own hand or orientation only to one side of the body	1



Weakness
Vision
Aphasia
Neglect

V
A
N

Table 1 Vision, aphasia, neglect emergent large vessel occlusion screening tool

Stroke VAN

How weak is the patient? Mild (minor drift)
Raise both arms up Moderate (severe drift—touches or nearly touches ground)
 Severe (flaccid or no antigravity)
 Patient shows no weakness. Patient is VAN negative

(exceptions are confused or comatose patients with dizziness, focal findings, or no reason for their altered mental status then basilar artery thrombus must be considered; CTA is warranted)

Visual disturbance Field cut (which side) (4 quadrants)
 Double vision (ask patient to look to right then left; evaluate for uneven eyes)
 Blind new onset
 None

Aphasia Expressive (inability to speak or paraphasic errors); do not count slurring of words (repeat and name 2 objects)
 Receptive (not understanding or following commands) (close eyes, make fist)
 Mixed
 None

Neglect Forced gaze or inability to track to one side
 Unable to feel both sides at the same time, or unable to identify own arm
 Ignoring one side
 None

Patient must have weakness plus one or all of the V, A, or N to be VAN positive. VAN positive patients had 100% sensitivity, 90% specificity, positive predictive value 74%, and negative predictive value 100% for detecting large vessel occlusion. CTA, CT angiography; VAN, vision, aphasia, and neglect.

LARIO, Large ARtery Intracranial Occlusion.

NATIONAL INSTITUTES OF HEALTH STROKE SCALE (NIHSS)

Item	Title	Responses and Scores
1a.	Level of consciousness	0—alert 1—drowsy 2—obtunded 3—coma/unresponsive
1b.	Orientation questions (2)	0—answers both correctly 1—answers one correctly 2—answers neither correctly
1c.	Response to commands (2)	0—performs both tasks correctly 1—performs one task correctly 2—performs neither
2.	Gaze	0—normal horizontal movements 1—partial gaze palsy 2—complete gaze palsy
3.	Visual fields	0—no visual field defect 1—partial hemianopia 2—complete hemianopia 3—bilateral hemianopia
4.	Facial movement	0—normal 1—minor facial weakness 2—partial facial weakness 3—complete unilateral palsy
5.	Motor function (arm) a. Left b. Right	0—no drift 1—drift before 10 seconds 2—falls before 10 seconds 3—no effort against gravity 4—no movement

Item	Title	Responses and Scores
6.	Motor function (leg) a. Left b. Right	0—no drift 1—drift before 5 seconds 2—falls before 5 seconds 3—no effort against gravity 4—no movement
7.	Limb ataxia	0—no ataxia 1—ataxia in 1 limb 2—ataxia in 2 limbs
8.	Sensory	0—no sensory loss 1—mild sensory loss 2—severe sensory loss
9.	Language	0—normal 1—mild aphasia 2—severe aphasia 3—mute or global aphasia
10.	Articulation	0—normal 1—mild dysarthria 2—severe dysarthria
11.	Extinction or inattention	0—absent 1—mild loss (1 sensory modality lost) 2—severe loss (2 modalities lost)

Scoring range is 0-42 points.
The higher the number, the greater the severity.

Score	Stroke Severity
0	No stroke symptoms
1-4	Minor stroke
5-15	Moderate stroke
16-20	Moderate to severe stroke
21-42	Severe stroke

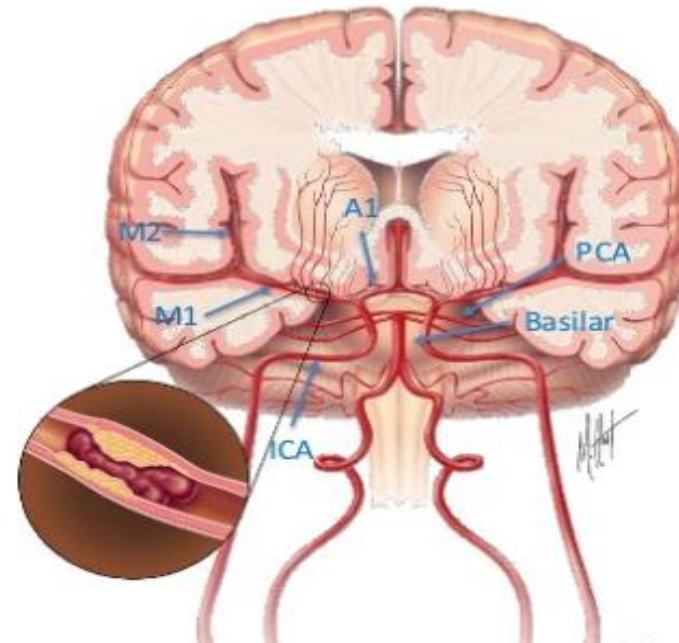
Stroke iskemik akut

Small Vessel Occlusion

Large Vessel Occlusion

Large Vessels of the Brain

- Main Vessels Treated with Thrombectomy
 - MCA – M1 & M2
 - ACA (A1)
 - ICA
 - Basilar
 - PCA



VAN PROTOKOL

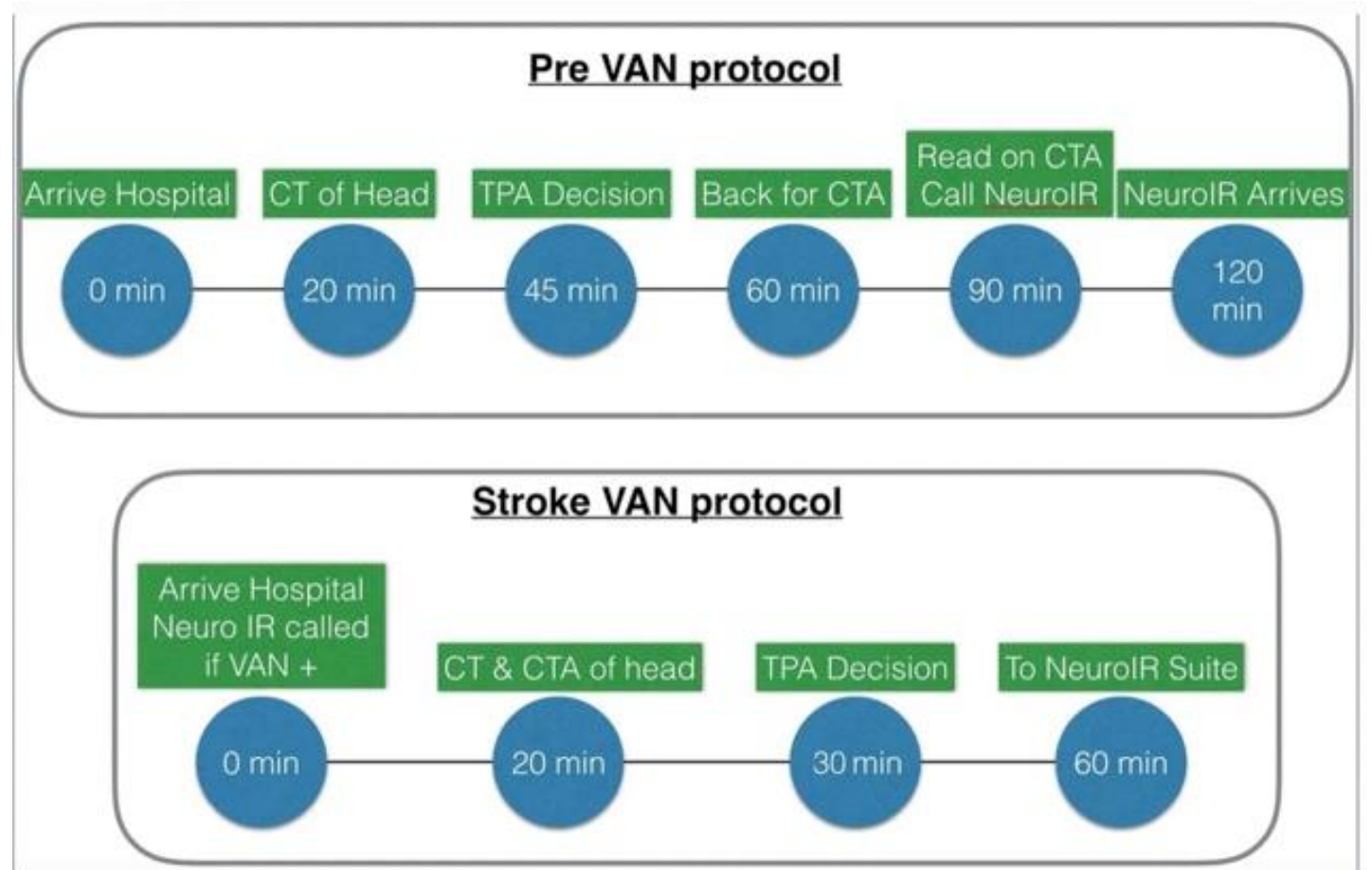
Table 1 Vision, aphasia, neglect emergent large vessel occlusion screening tool

Stroke VAN

How weak is the patient? Raise both arms up	<input type="checkbox"/> Mild (minor drift) <input type="checkbox"/> Moderate (severe drift—touches or nearly touches ground) <input type="checkbox"/> Severe (flaccid or no antigravity) <input type="checkbox"/> Patient shows no weakness. Patient is VAN negative
Visual disturbance	<input type="checkbox"/> Field cut (which side) (4 quadrants) <input type="checkbox"/> Double vision (ask patient to look to right then left; evaluate for uneven eyes) <input type="checkbox"/> Blind new onset <input type="checkbox"/> None
Aphasia	<input type="checkbox"/> Expressive (inability to speak or paraphasic errors); do not count slurring of words (repeat and name 2 objects) <input type="checkbox"/> Receptive (not understanding or following commands) (close eyes, make fist) <input type="checkbox"/> Mixed <input type="checkbox"/> None
Neglect	<input type="checkbox"/> Forced gaze or inability to track to one side <input type="checkbox"/> Unable to feel both sides at the same time, or unable to identify own arm <input type="checkbox"/> Ignoring one side <input type="checkbox"/> None

Patient must have weakness plus one or all of the V, A, or N to be VAN positive. VAN positive patients had 100% sensitivity, 90% specificity, positive predictive value 74%, and negative predictive value 100% for detecting large vessel occlusion. CTA, CT angiography; VAN, vision, aphasia, and neglect.

VAN PROTOKOL

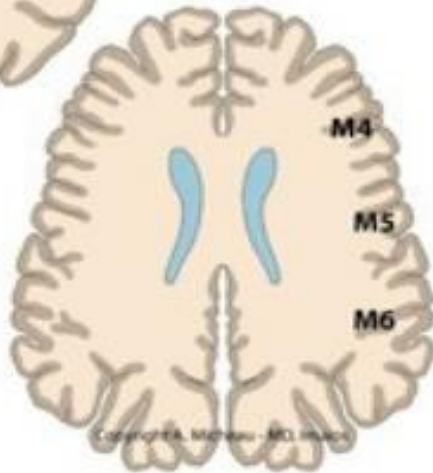
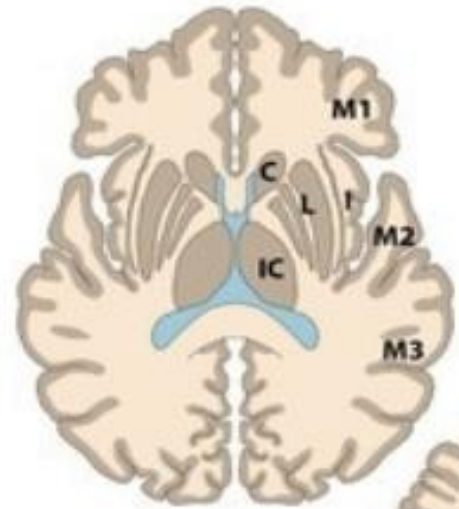


Pre-VAN Protocol vs. Post VAN Protocol (Teleb 2017)

CT SCAN

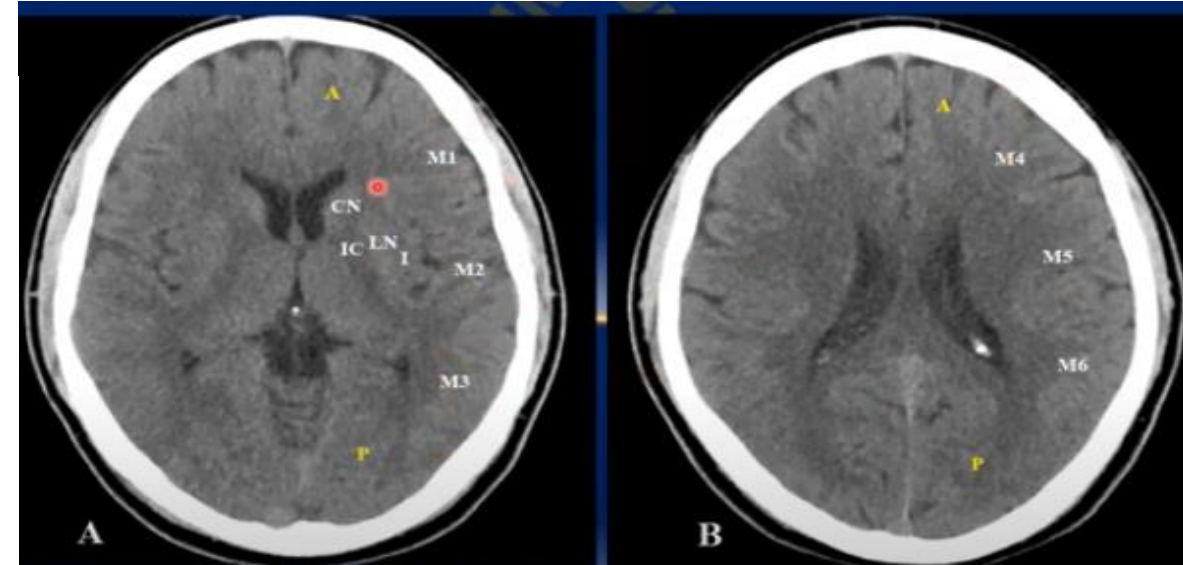
Alberta Stroke Programme Early CT Score (ASPECTS)

ASPECTS Score



- C- Caudate
- I- Insular ribbon
- IC- Internal Capsule
- L- Lentiform nucleus
- M1- Anterior MCA cortex
- M2- MCA cortex lateral to the insular ribbon
- M3- Posterior MCA cortex
- M4- Anterior MCA superior territory
- M5- Lateral MCA superior territory
- M6- Posterior MCA superior territory

ASPECTS Score = /10



- CT scan normal : SKOR ASPECTS 10 poin
- Menilai : Hypoattenuation , Pembengkakan otak fokal pada area ACM
- 1 poin dikurangkan untuk area dengan perubahan iskemik awal, seperti pembengkakan fokal, atau hypoattenuasi parenkim
- **SKOR ASPECTS 7 atau < 7** : risiko perdarahan intraserebral dengan alteplase 14 kali lipatnya pasien dengan skor lebih dari 7.
- **SKOR di atas 7** : tingkat keberhasilan alteplase tinggi, tingkat intracerebral simptomatik perdarahan 1%

Pc -ASPECT Posterior Circulation

Sistem Skor : total 10

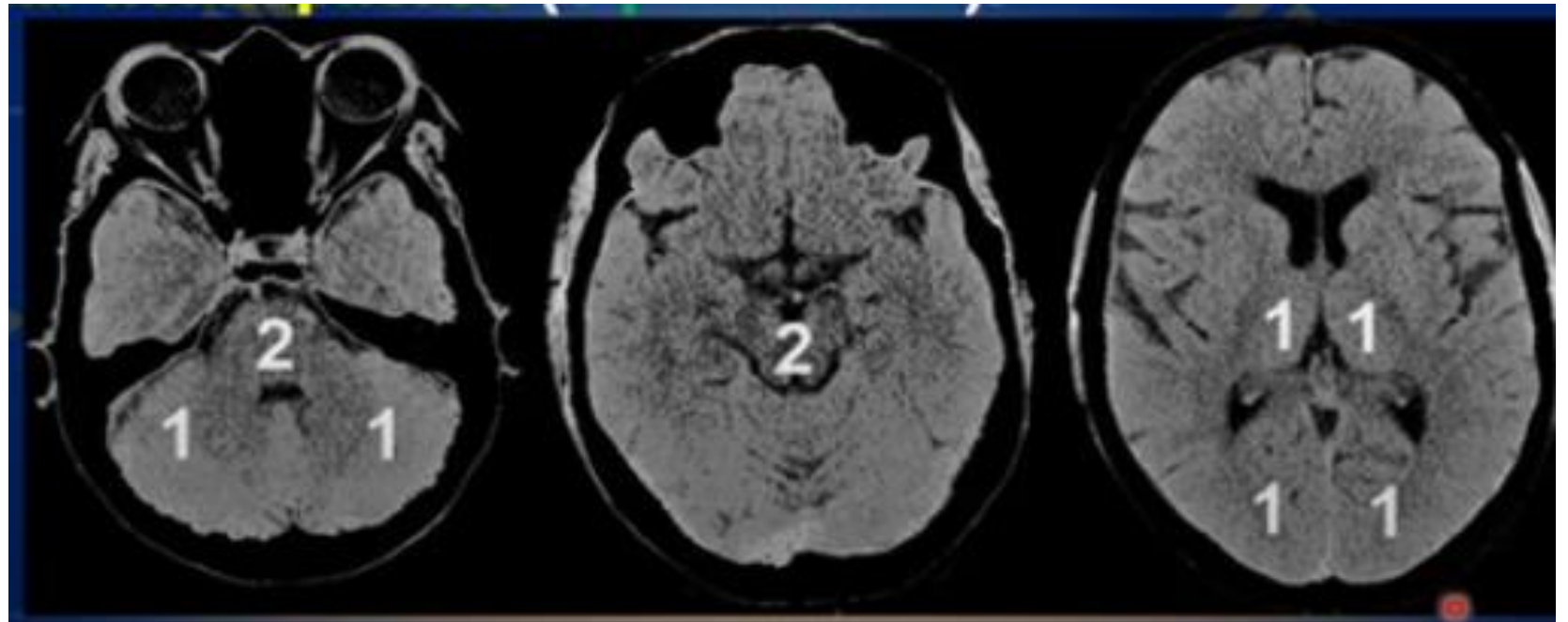
Thalamus : 1 poin

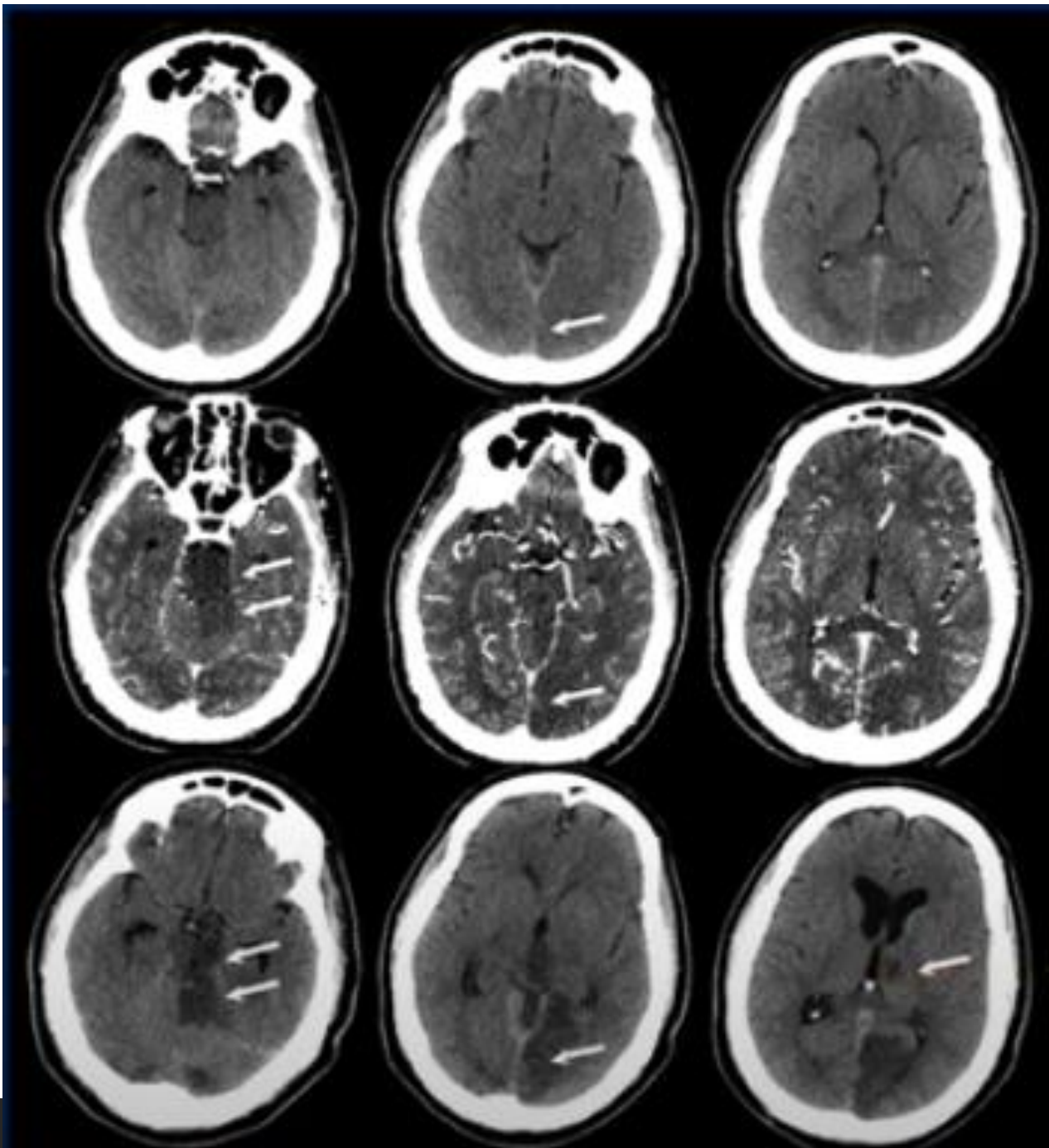
Lobus occipital : 1 poin

Midbrain : 2 poin

Pons : 2 poin

Cerebellar hemisfer : 1 poin





PC-ASPECT = 9/10

PC-ASPECT = 6/10

PC-ASPECT = 5/10

SPEC

RAHIM

HIM

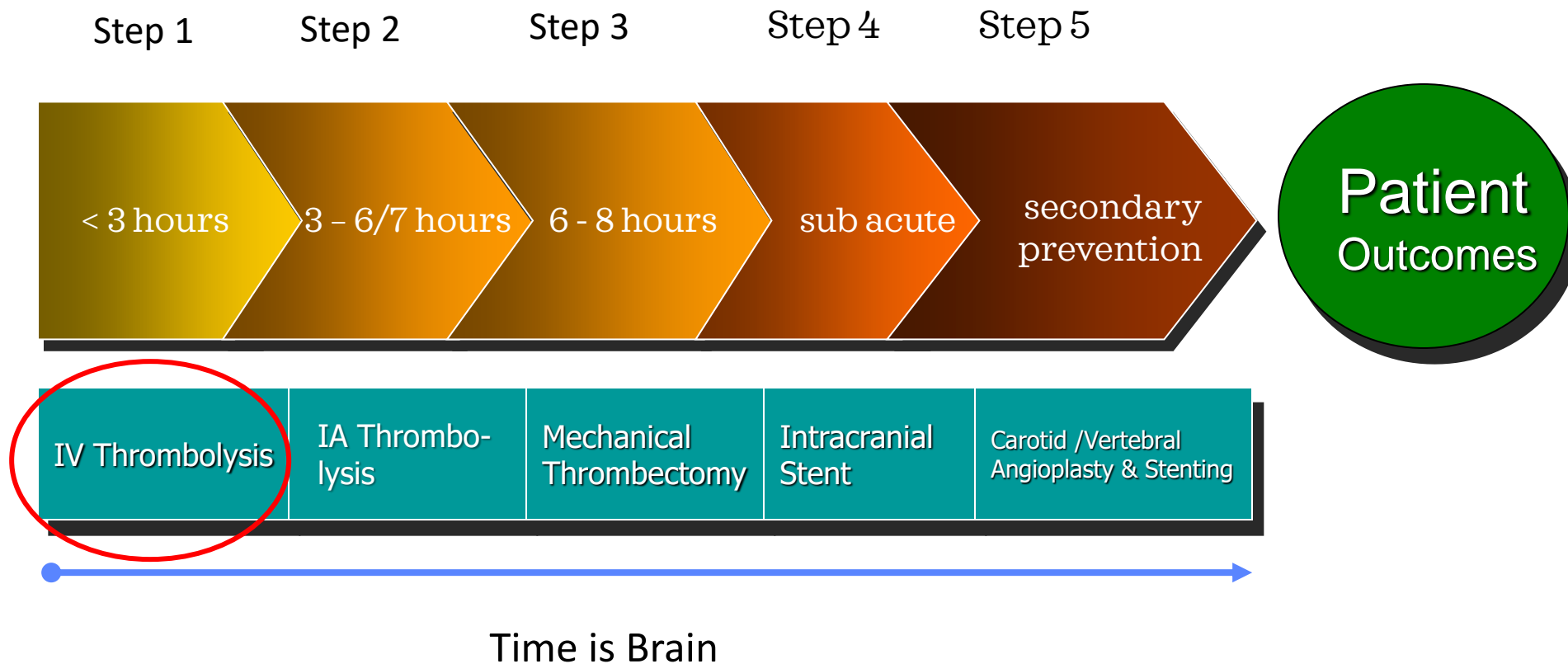
C

PENATALAKSANAAN KHUSUS STROKE AKUT

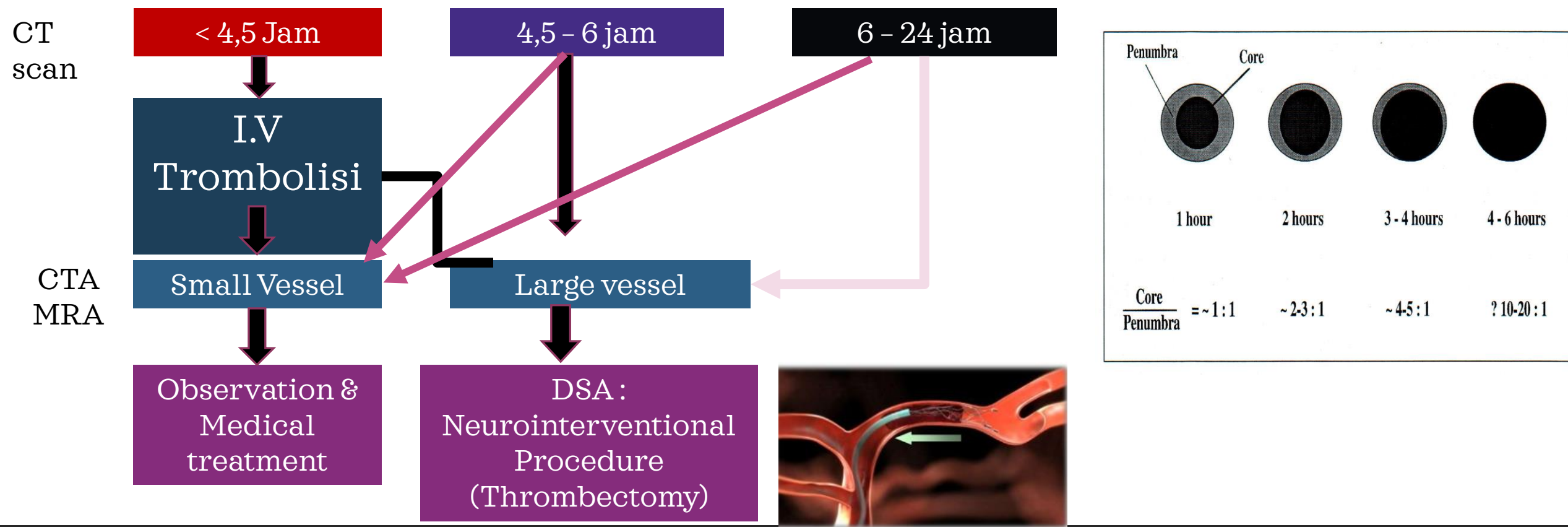
Terapi Umum – Khusus

Breath	Blood	Brain	Bowel	Bladder
<ul style="list-style-type: none"> Amankan jalan nafas, oksigenasi Sumbatan jalan nafas, cegah aspirasi → dimiringkan 	<p>Hipertensi</p> <ul style="list-style-type: none"> 10/5 mmHg,- tekanan darah normal didefinisikan <120/80 mmHg Tensi > 220/110 : pada stroke iskemik Tensi >140/100 : Pada stroke infark 	<p>TIK meningkat (T.D naik, bradikardi, bradipnea)</p> <ul style="list-style-type: none"> Head Up 30 Terapi hiperosmolar : manitol Operasi dekompresi (ICH) Extraventricular drainage (IVH) Aneurisma : clipping, coiling (SAH) 	<p>Infus cairan NS sesuai kebutuhan tubuh 25-30cc/kg</p> <p>Kebutuhan kalori : 25-30 kkal/kgbb</p> <p>Puasa 24 jam pertama</p> <p>Disfagia : Nasogastric tube</p> <p>Konstipasi : enema (bab belum 4 hari)</p> <p>Atasi pendarahan GI</p>	<p>Fx saluran kemih :</p> <ul style="list-style-type: none"> inkontinensia urin → hindari dekubitus Retensi urin → TIK ↑ (kateter jika px tak bak > 6 jam)
	<p>Gula darah</p> <p>Cegah hiperglikemia, hipoglikemia</p>	<p>Indikasi operasi ICH</p> <ul style="list-style-type: none"> Pendarahan ICH + kelainan struktural Pendarahan vol 60 cc GCS > 6 GCS < 4 pendarahan cerebellum ø 3 cm 	<p>Non operasi</p> <ul style="list-style-type: none"> Vol 10 cc GCS < 4 (kecuali ich cerebellum) Ich deep area 	

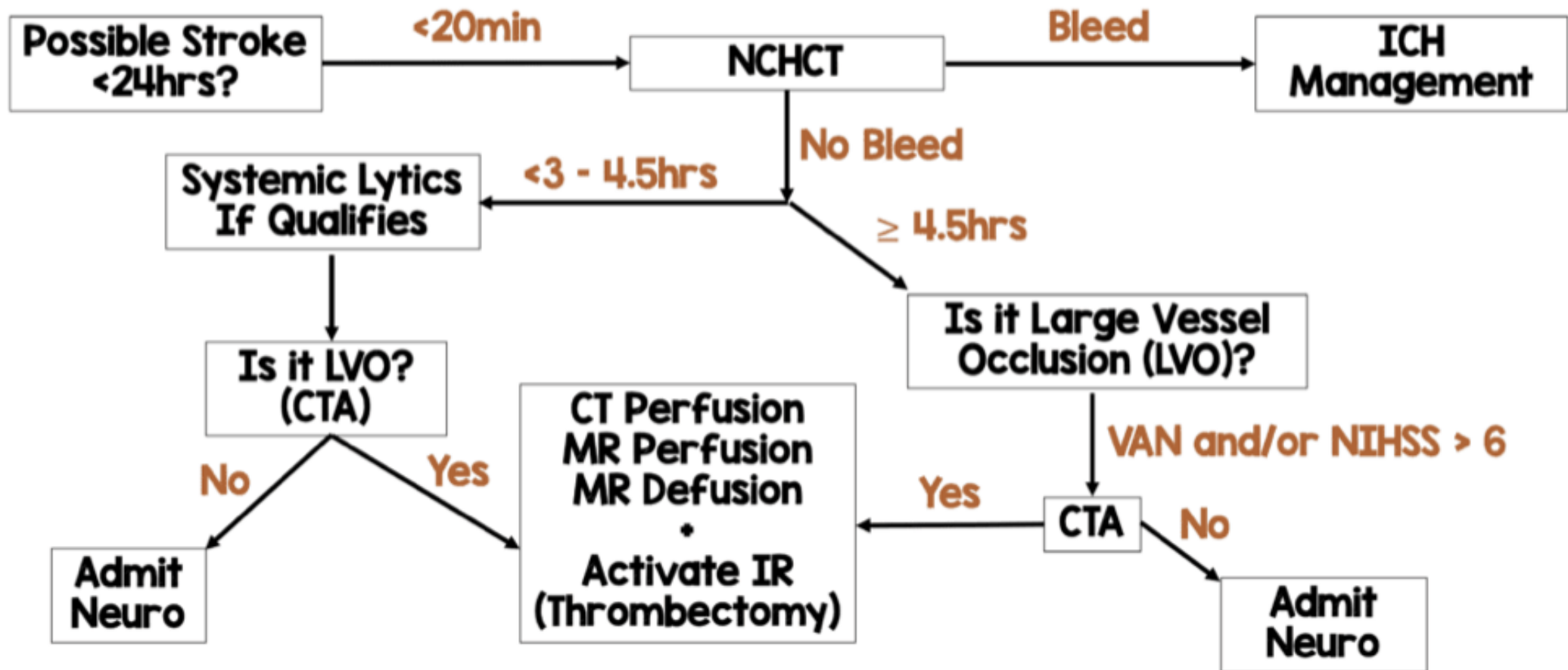
Modern Management of Acute Ischemic Stroke With Endovascular Strategy



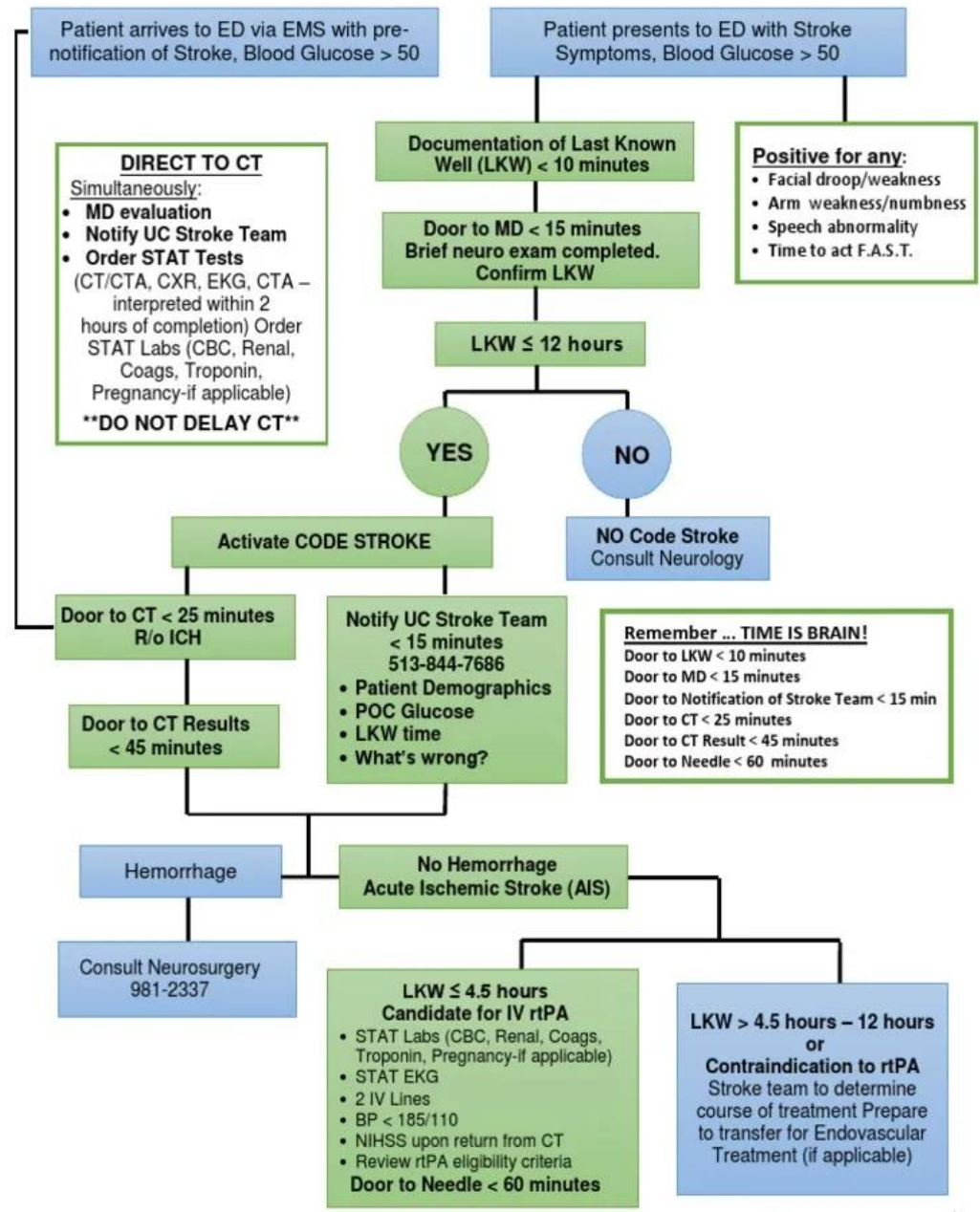
Hyperacute ischemic stroke : masih memungkinkan dilakukan reperfusi - recanalisasi



Stroke Workflow



Emergency Services CODE STROKE algorithm



Rekomendasi : Hyperacute Ischemic stroke

IV recombinant Tissue Plasminogen Activator dosis 0,9 mg/KgBB (maksimum 90 mg)

10% dari dosis total diberikan sebagai bolus inisial, dan sisanya diberikan sebagai infus selama 60 menit

rTPA harus segera hentikan bila terdapat perdarahan yang dianggap serius

Alasan 1: Trombolisis menggunakan IV alteplase adalah *gold standard* penanganan stroke yang optimal (Stroke Guideline AHA/ASA 2018)

3.5. IV Alteplase	COR	LOE	New, Revised, or Unchanged
1. IV alteplase (0.9 mg/kg, maximum dose 90 mg over 60 minutes with initial 10% of dose given as bolus over 1 minute) is recommended for selected patients who may be treated within 3 hours of ischemic stroke symptom onset or patient last known well or at baseline state. Physicians should review the criteria outlined in Table 6 to determine patient eligibility.	I	A	Recommendation reworded for clarity from 2013 AIS Guidelines. Class and LOE unchanged. See Table LXXXIII in online Data Supplement 1 for original wording.
2. IV alteplase (0.9 mg/kg, maximum dose 90 mg over 60 minutes with initial 10% of dose given as bolus over 1 minute) is also recommended for selected patients who can be treated within 3 and 4.5 hours of ischemic stroke symptom onset or patient last known well. Physicians should review the criteria outlined in Table 6 determine patient eligibility.	I	B-R	Recommendation reworded for clarity from 2013 AIS Guidelines. Class unchanged. LOE amended to conform with ACC/AHA 2015 Recommendation Classification System. See Table LXXXIII in online Data Supplement 1 for original wording.
1.5. Hospital Stroke Teams	COR	LOE	New, Revised, or Unchanged
1. An organized protocol for the emergency evaluation of patients with suspected stroke is recommended.	I	B-NR	Recommendation and Class unchanged from 2013 AIS Guidelines. LOE amended to conform with ACC/AHA 2015 Recommendation Classification System.
2. It is recommended that DTN time goals be established. A primary goal of achieving DTN times within 60 minutes in ≥50% of AIS patients treated with IV alteplase should be established.	I	B-NR	Recommendation revised from 2013 AIS Guidelines.

Antithrombotic

Px i.v rtpa : pemberian antiplatelet ditunda selama 24 jam u/ meminimalkan risiko perdarahan

Menurunkan risiko stroke berulang atau kematian di rumah sakit lebih rendah dengan aspirin (dengan dosis 160 hingga 300 mg yang diberikan dalam waktu 48 jam setelah stroke iskemik akut)

NIHSS score <3 / high risk TIA (ABCD2 :Age, Blood Pressure, Clinical Features, Duration, Diabetes) : risiko stroke berulang (iskemik) selama 90 hari lebih rendah

- TX antiplatelet ganda – 21 hari (clopidogrel dosis awal 300 mg → kemudian 75 mg per hari + aspirin pada dosis awal 75 mg setiap hari)

atrial fibrillation : Risiko recurrent ischemic stroke menurun

- terapi subcutaneous heparin (mulai dalam 48 jam setelah onset dan dilanjutkan smp 14)



Terapi tambahan - simptomatis

1. Neuroprotektan (pirasetam, citicolin)
(Rekomendasi II, LOE: A)
2. Anti mual
3. Anti kejang
4. Anti nyeri
5. Vitamin
6. Dll.

mRS Scale :

Evaluasi post Rtpa - respon terapi

Modified Rankin Score

	4 minggu sebelum serangan stroke (status premorbid)	24 jam	72 jam
0 = Tidak ada gejala			
1 = Gejala ringan, dapat melakukan pekerjaan dan aktivitas sebelumnya	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 = Tidak dapat melakukan aktivitas sebelumnya tetapi dapat mandiri tanpa perlu bantuan untuk aktivitas mengurus diri sehari-hari (<i>activity daily living - ADL</i>)			
3 = Membutuhkan bantuan untuk ADL tetapi dapat berjalan sendiri			
4 = Tidak dapat berjalan tanpa bantuan dan tidak dapat mengurus diri sendiri			
5 = <i>Bedridden</i> , inkontinensia, dan membutuhkan perawatan rutin			
6 = Meninggal dunia			

Evaluasi dalam 3
bulan

TERIMA KASIH
