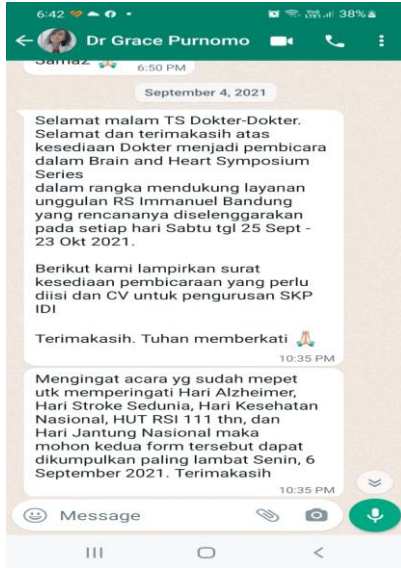


Dipublikasikan pada : **Immanuel Brain and Heart Virtual Symposium Series**
Penyelenggara : RS Immanuel Bandung
Judul : **Stroke Hemorrhagic**
Tanggal : 16 Oktober 2021
Tempat : Bandung

Permohonan menjadi pembicara (melalui whats app)



Kesediaan menjadi pembicara

WEBINAR MEDIS SERIES 111 TAHUN RS IMMANUEL BANDUNG
Jl. Kopo No 161
BANDUNG-40234

Kepada
Yth. Panitia Webinar Medis Series 111 Tahun RS Immanuel Bandung
Di tempat

SURAT PERNYATAAN KESEDIAAN


Bersama ini disampaikan bahwa saya BERSEDIA menjadi PEMBICARA pada Webinar Medis Series 111 Tahun RS Immanuel Bandung "**BRAIN & HEART VASCULAR**" yang diselenggarakan oleh RS Immanuel Bandung pada Hari Sabtu, Tanggal : 25 September 2021, 2 Oktober 2021, 9 Oktober 2021, 16 Oktober 2021, 23 Oktober 2021.

Judul lengkap Topik tertera pada susunan acara.
Curriculum Vitae Terlampir.

Demikian agar maklum adanya.

Bandung, 6 September 2021

Tanda tangan,


(dr. Dedeh Supantini, SpS, MPdKed)
Nama Jelas

Jadwal acara

1	UNIT KERJA RUMAH SAKIT IMMANUEL BANDUNG					
2	Jl. Kopo No 161 Bandung, 40234					
3						
4	MATERI WEBINAR MEDIS SERIES 111 TAHUN					
5	NO	WAKTU	KSM	TOPIK	SUB TOPIK	NARASUMBER
6	Sabtu, 25 September 2021					
7	1	10.15-10.30	Neurology	Dementia : Alzheimer's vs stroke vs Covid- 19	Dementia in Pandemic Era	dr. Noveline Sagita, SpN
8		10.30-10.45	Neurology		Cognitive Problems After COVID-19	dr. Sylvia Tanumihardja, SpS
9		10.45-11.00	Radio-Imaging		Imaging in Dementia	dr. Wawan Kustiawan, SpRad
10	Sabtu, 2 Oktober 2021					
11	5	10.15-10.30	Cardiology	Heart Problems In Pandemic	PCI in Pandemic Era (Who - When and Why ?)	dr. Edwin Setiabudi, SpPd-KKV
12		10.30-10.45	Cardiology		Heart Attack in Pandemic	dr. Vika Fransisca K.C, SpJP
13		10.45-11.00	Cardiology		Heart Problems in Covid " Long haulers"	dr. Triwedya Indra Dewi, SpJP
14	Sabtu, 9 Oktober 2021					
15	3	10.15-10.30	Neurology	Brain and Heart	Stroke and Atrial Fibrillation / Heart problems	dr. Sylvia Tanumihardja, SpS
16		10.30-10.45	Cardiology		Antihypertension : How low can you go ? (In Cerebrovascular / Cardiovascular events)	dr. Pudji Rusmono Aji, SpPD-KKV
17		10.45-11.00	Cardiology		Antiplatelet vs Anticoagulant (Who-When-Why-How long ?)	dr. Teddy Arnold Sihite, SpPD., SpJP
18	Sabtu, 16 Oktober 2021					
19	4	10.15-10.30	Neurology	Stroke Hemorrhagic	Hemorrhagic Stroke Management in Pandemic Era	dr. Dedeh Supantini, SpS, MPdKed
20		10.30-10.45	Radio-Imaging		Endovascular Treatment in Hemorrhagic Stroke (Who - When and Why ?)	dr. Hillman, SpRad (Intv)
21		10.45-11.00	Neurosurgery		Craniotomy decompression and clipping in Hemorrhagic Stroke (Subarachnoid Bleeding)	dr. Guata Naibaho, SpBS
22	Sabtu, 23 Oktober 2021					
23	2	10.15-10.30	Emergency	Ischemik Stroke	Ischemic Stroke Diagnosis In Emergency Department during Pandemic	dr. Andri Octavallen, SpEM
24		10.30-10.45	Neurology		Ischemic Stroke Management during Pandemic	dr. Noveline Sagita, SpN
25		10.45-11.00	Radio-Imaging		Ischemic Stroke Imaging	dr. Justin Ginting, SpRad
26		11.00-11.15	Radio-Imaging		Endovascular Treatment in Ischemic Stroke (Who - When and Why ?)	dr. Hilman, SpRad { Intv}
27						
28						
29						

Pengumuman acara



WEBINAR MEDIS SERIES 111 TAHUN RS IMMANUEL

“ Immanuel Brain and Heart Virtual Symposium Series ”

Stroke Hemorrhagic

FREE

Narasumber





dr. Dedeh Supantini, SpS

Sub Topik

Hemorrhagic Stroke Management in Pandemic Era



dr. Hilman, Sp.Rad (Intv)

Sub Topik

Endovascular Treatment in Hemorrhagic Stroke (Who - When and Why ?)



dr. Guata Naibaho, SpBS

Sub Topik

Stroke Hemorrhagic dalam Bedah Saraf



dr. Grace E. Purnomo, M.Kes

Moderator

16 Okt 2021

Sabtu pk.09.00-12.00 WIB

Webinar Series Medis Setiap hari Sabtu



Accredited by :





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Materi

Hemorrhagic Stroke Management in Pandemic Era

DEDEH SUPANTINI
REINTEGRATED BRAIN AND HEART VIRTUAL SYMPOSIUM SERIES
16 OCTOBER 2021

Introduction

STROKE = The 2nd leading cause of death and the 3rd leading causes of disability in the world (WHO 2016)

Stroke 2013: the prevalence of stroke as a leading cause of death in 195 countries

Stroke 2016: the prevalence of stroke as a leading cause of death in 195 countries

The leading cause of death in almost all countries in Indonesia

83.5% stroke-related disability pre-hospital entry

Increased global stroke systems of care

Disparity of stroke in the area of stroke epidemiology

Definition

Stroke: sudden onset of focal (or global) disturbance of cerebral function, with symptoms lasting 24 hours or longer or leading to death, with no apparent cause other than of vascular origin (WHO)

Types of Stroke

- Ischemic
- ICH
- SAH

Hemorrhagic Stroke

Hemorrhagic stroke is due to bleeding into the brain by the rupture of a blood vessel

- Intracerebral hemorrhage (ICH)
- Subarachnoid hemorrhage (SAH)

ICH

- Hypertensive ICH**
 - HTN
 - Lipohyalinosis, focal necrosis of the subarachnoid space → Charcot-Bottcher microangiopathy
- Non-hypertensive**
 - Arteriovenous malformation (AVM), Berry (cerebral) aneurysm
 - Congenital
 - Cerebral Amyloid angiopathy (CAA) elderly
 - Idiopathic arteriovenous, drug abuse (cocaine, amphetamine)

Acute & spontaneous rupture of intracerebral artery (IC branch)

Figure 56.4 Hypertensive intracerebral hemorrhage. Pathogenesis.

ICH Location Based on Etiology

SAH

- Berry/ Saccular Aneurysms**
 - 80%
 - Acute rupture of artery if it branches to the subarachnoid space
- Non-aneurysmal**
 - Trauma
 - Drugs
 - Cerebral intracranial artery
 - Drug abuse (cocaine, amphetamine)
 - Congenital

Clinical Features

- Acute onset headache
- Vomiting
- Decrease of consciousness
- Seizures
- Neck stiffness
- Rapidly developing neurological signs
- Symptoms can lead to the extent and location of hemorrhage

Raised ICP

- Severe headache described as a thunderclap
- Vomiting
- Nuchal rigidity
- Seizures
- Decreased level of consciousness
- At onset: focal neurological deficit: (-) or minimal

Evaluation

- Non-contrast head CT Scan: remains the gold-standard imaging modality in the initial diagnosis of ICH, as it is easily accessible and fast.
- MRI: is also a good imaging modality for ICH identification and can also help reveal old clots, but has the downfall of taking more time and being less readily available.

- CT Scan:** Area of hyperdensity
- ICH: within the parenchyma, with surrounding hypodensity, (perivascular edema).
- SAH: within subarachnoid space

- MRI**
- Can distinguish between the hemorrhagic transformation of infarct and primary hemorrhage.
- Detect underlying causes of secondary hemorrhages, such as vascular malformations.

- CT Angiography (CTA), MR Angiography, DSA** of the intracranial vessels: identify vascular pathology that may be the cause for the ICH/ SAH.

Management

Prehospital

Early Detection

- 20% onset = in the community
- Timely care
- Early Detection: Gerbang SaktiStroke

Referral

- Transport the patient to the closest health care facility (empower to care for patients with acute stroke)
- Assistance
- Health care staff with comprehensive knowledge of prehospital stroke care & BLS: stabilization

WAJIBADA STROKE MENGINCAR ANDA

TIPS MUDAH MENGENALI GEJALA DAN TANDA-TANDA STROKE

Ingat Singkat **SeGeRa Ke RS**

Emergency Department

Reactivation Room

Evaluation and Triage	General Management	Transfer
<ul style="list-style-type: none"> • Assessment • Physical • Neurological • ECG • Lab 	<ul style="list-style-type: none"> • ABC • Life • Neurological • Neurological • Early detection & timeliness 	<ul style="list-style-type: none"> • System • ICH • ICH

STROKE CODE

General Stroke Treatment

ABC

Specific Treatment → Hemorrhagic Stroke

- Diagnosis: CT atau MRI CT angiography, MRA, in case suspected as vascular malformation,
- Treatment of underlying cause of ICH/SAH
- Invasive procedure:
 - Craniotomy, hematoma evacuation, external drainage, VPS
 - Endovascular intervention
- Secondary prevention
- Rehabilitation

Surgical Procedure

- The decision about whether and when to operate remains controversial.
- Patients with small hemorrhage (<10 ml) or minimal neurological deficits should be treated medically because they generally do well with medical treatment alone.
- Patients with a GCS score ≤4 should also be treated medically → have extremely poor functional outcome that cannot be improved by surgery.
- Patients with cerebellar hemorrhage who are deteriorating neurologically or who have brainstem compression and/or hydrocephalus from ventricular obstruction should undergo surgical removal of the hemorrhage as soon as possible (AHA/ASA Class I; Level of Evidence B). Early procedure with ventricular drainage only is not recommended (Class III, LOE C).

- Timing of surgery: controversial
- Randomized prospective trials: 4-8 hours after symptom onset.
- STICH II (2013): better outcome if operated on < 21 hours from ictus
- Ultra-early craniotomy (within 4 hours from ictus) was associated with an increased risk of rebleeding (RCT).

Surgical Candidate

1. Patients with cerebellar hemorrhage who are neurologically deteriorating or who have brain stem compression and hydrocephalus from ventricular obstruction.
2. Patient with lobar ICH > 30 ml located < 1cm from cranium can be considered (AHA/ASA Class IIb, level of evidence B)
3. ICH/SAH associated with a structural lesion such as an aneurysm, arteriovenous malformation, cavernous angioma may be removed if the patient has a chance for a good outcome and the structural vascular lesion is surgically accessible.
4. Young patients with a moderate or large lobar hemorrhage who are clinically deteriorating.

Hemorrhagic Stroke Management in Pandemic Era

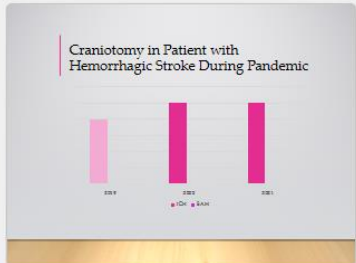
SARS-CoV-2: December 2019 from China → universal spread COVID-19 → 11 March 2020: WHO declared a global pandemic of COVID-19

Impacted global stroke systems of care

Reports of decline in the rates of stroke hospitalizations

- Global impact of Covid-19 on stroke care
- Retrospective, observational, international study across 6 continents, 40 countries, and 167 comprehensive stroke centers
- The COVID-19 pandemic was associated with a global decline in the volume of overall stroke hospitalizations, and intracranial hemorrhage admission volumes.

Challenge: Covid-19 Pandemic should not deter The Management of stroke



31 ★



32 ★

Effort to Serve Stroke Patients in this COVID-19 Pandemic

- Contraindications should be managed, should continue to be provided throughout the patient's care
- Stroke infection control
- Protect the patient and health care staff
- Isolation: Stroke signs and symptoms
- Transfer to treatment department
- Anticoagulant and respiratory
- Stroke patients: Screening for SARS-CoV-2
- Intervention?

33 ★

Case 1. June 2020

- 61 years old with sudden onset of paresthesia in the right side of the body, and decreased of consciousness
- ED: Sopor. BP:203/128 mmHg. Right hemiplegia.
- Rapid Test (+)
- Covid-19 isolation ward

34 ★

- Blood pressure-lowering treatment
- Mannitol for ICP management
- Other symptomatic and supportive treatment
- Day 2 visit: somnolent
- Gaze palsy to the left, right hemiplegia.
- Day 4: BP:153/100 mmHg. GCS 13. PCR result: (-)

35 ★

MRA

36 ★

Case II. June 2021

- 65 years old with confirmed COVID-19 pneumonia & decrease of consciousness
- Neurological physical exam:
 - Sopor
 - Neckal rigidity (+)
 - Motor response to pain without lateralization??
 - Labial sign (+)
- Conservative treatment for Stroke
- Day 4: +

37 ★

Case III. July - Agt 2021

- 61 years old with bilateral bronchopneumonia, confirmed COVID-19 (PCR+), hypertension, & decrease of consciousness.
- Head injury (+)
- Neurological physical exam:
 - Delirium
 - CT Scan: SAH
- Conservative treatment for SAH
- Day 14: discharge from the hospital

38 ★

Take Home Message

- Stroke is still remain a leading cause of death and disability
- In the face of future pandemic or anticipated surge of COVID-19 cases, ensure that the access and quality of stroke care remains preserved
- Precautions for the patient, rescue and hospital staff
- Continuous stroke care improvement is a must:
 - primary prevention
 - acute stroke recognition and activation of emergency medical services
 - treatment
 - secondary prevention at hospital discharge, and rehabilitation

39 ★

Thank You

40 ★

Stroke hemorrhagic

Dedeh Supantini, 2021