



ICCA STROKE 2019



Cryptogenic Stroke and PFO

Dheeraj Khurana

Incharge Stroke Program and Prof.

Department of Neurology

Postgraduate Institute of Medical Education and Research

Chandigarh, India

DISCLOSURE STATEMENT OF FINANCIAL INTEREST

Within the past 12 months, I have had a financial interest/arrangement or affiliation with the organization(s) listed below

AFFILIATION/FINANCIAL RELATIONSHIP

- Grant/Research Support
- Consulting Fees/Honoraria
- Major Stock Shareholder/Equity
- Royalty Income
- Ownership/Founder
- Intellectual Property Rights
- Other Financial Benefit

COMPANY

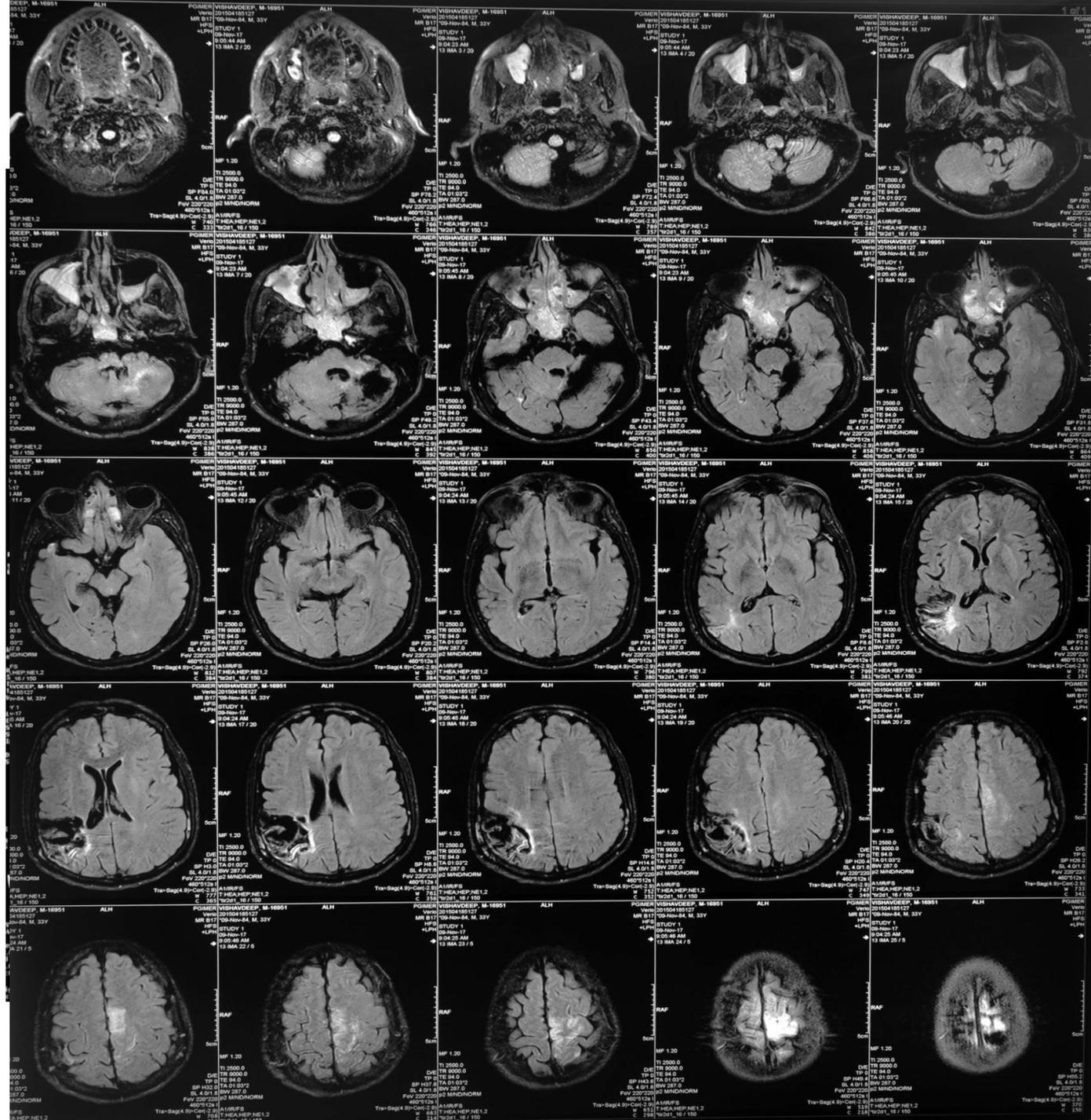
- Boehringer Ingelheim / Eisai
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DISCLOSURE STATEMENT OF FINANCIAL INTEREST

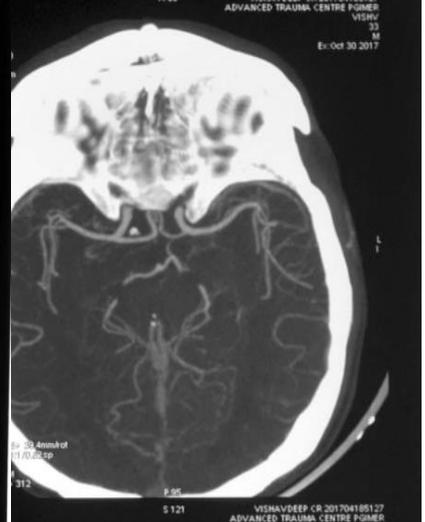
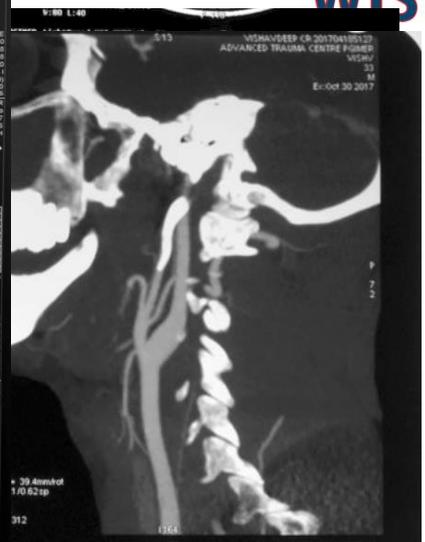
I, (Dheeraj Khurana) DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.



- 31/M **(Oct 2017)**
- Rt sided UL & LL weakness facial deviation to Lt side
Dysarthria: Thrombolysed with IV tPA (DTN- 33min)
- **Past History:** – 2006 Left sided weakness (Left superior cerebellar artery infarct): completely recovered, was started on ecosprin , Stopped it after 3 years. August 2015, Left sided weakness with facial deviation thrombolysed (outside), started his daily activities on 3rd day and after 4-5 days he started walking without support- On Clopidogrel 75 mg since 2015
- Prothrombotic W/U: -ve



STROKE 2019





TCD (Bubble Test)

→ R-MCA 4 Sec

AT BIRTH

PATENT FORAMEN OVALE (PFO)

▼	Depth	Gain	Power	Sample	Scale	Zero	Volume	Env	Probe	PW
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TEE

PHILIPS

TIS0.7 MI 0.4

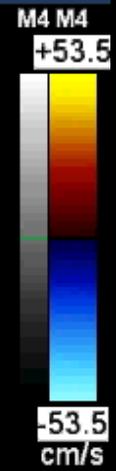
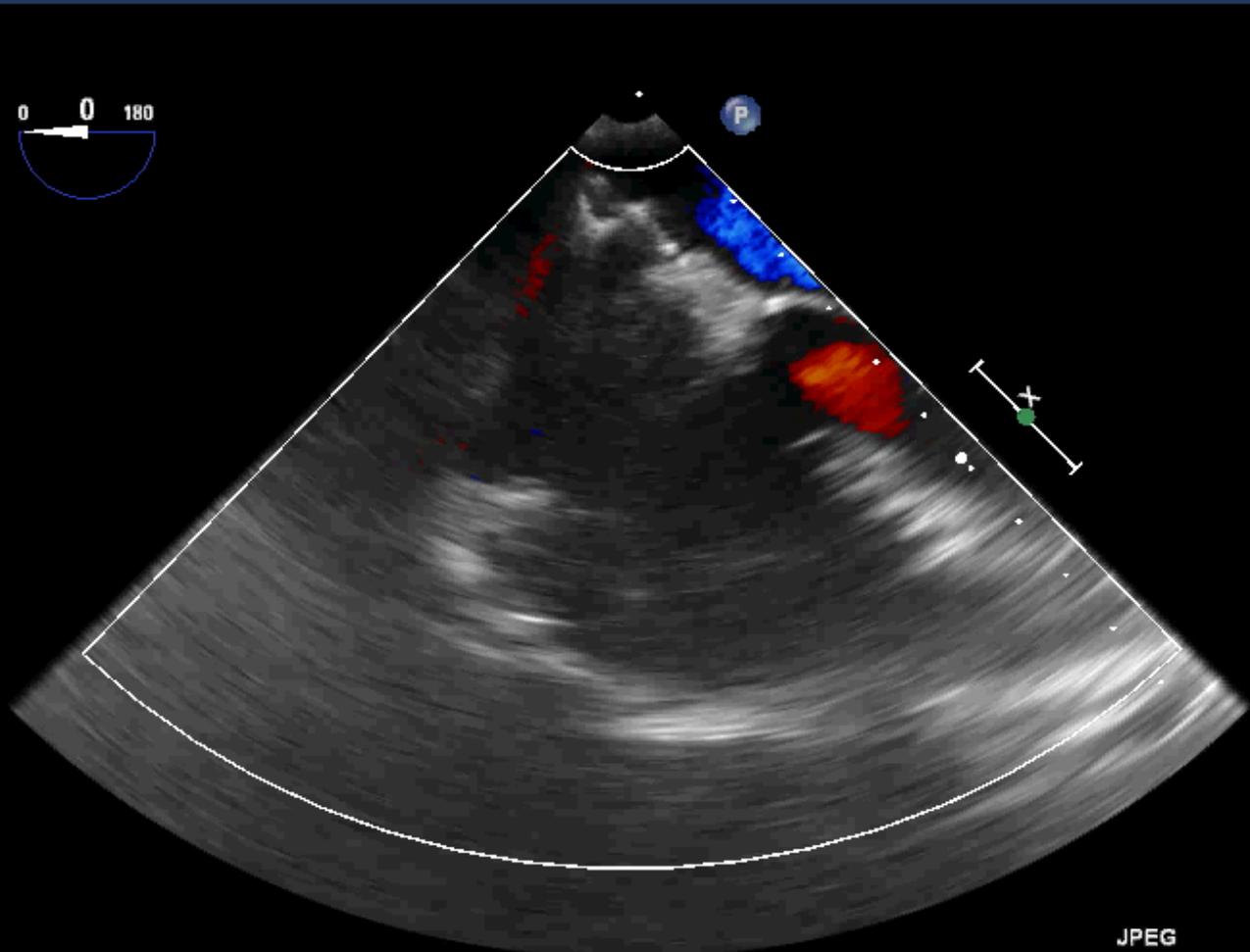
X7-2t/Adult

2D
77%
C 50
P Off
Gen

2D
77%
C 50
P Off
Gen

CF
59%
4.4M
WF |
Med

CF
59%
4.4MHz
WF High
Med



JPEG

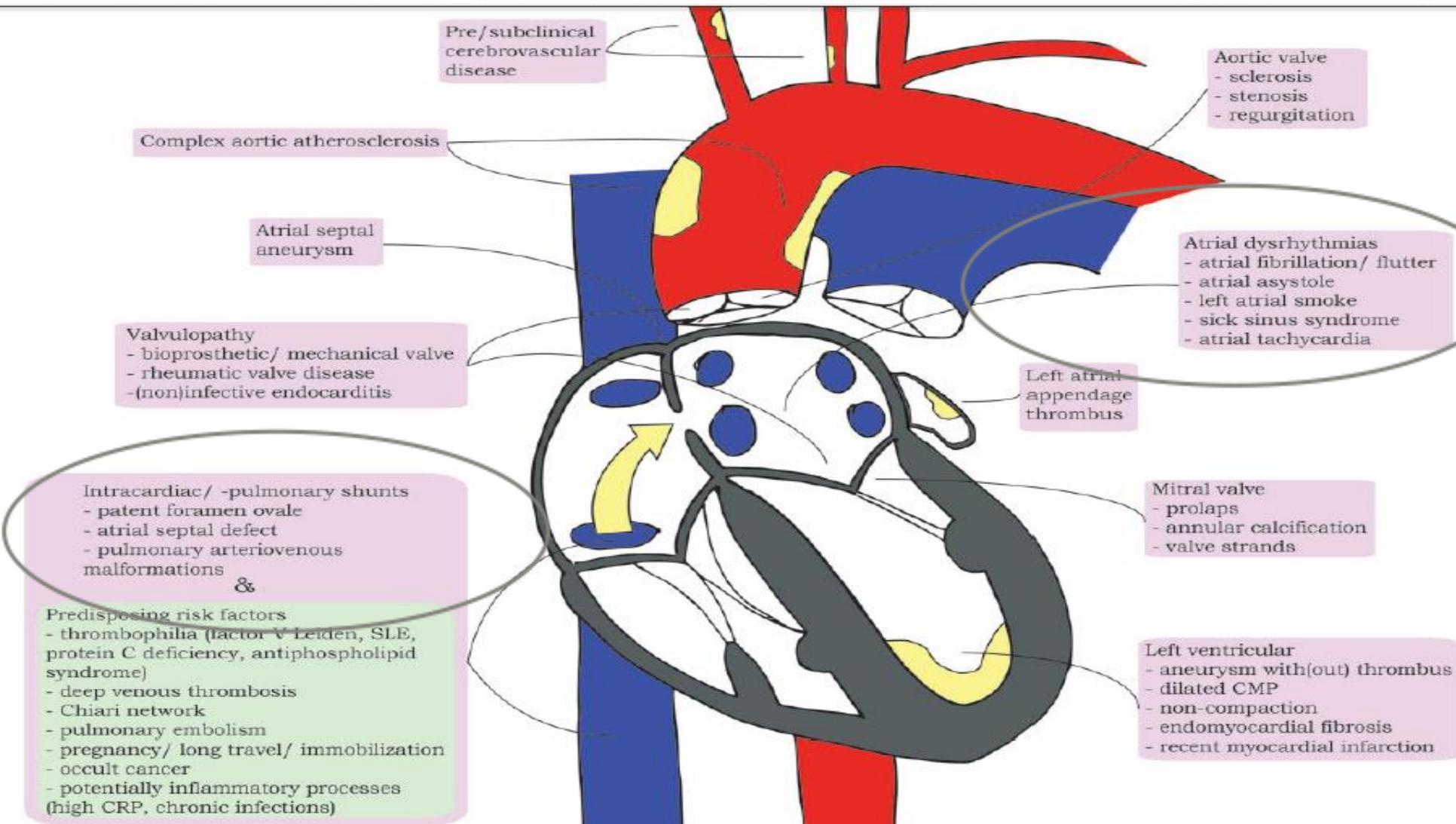
PAT T: 37.0C
TEE T: 37.0C

*** bpm

ESUS

1. Ischemic stroke detected by CT or MRI that is not lacunar†
2. Absence of extracranial or intracranial atherosclerosis causing $\geq 50\%$ luminal stenosis in arteries supplying the area of ischemia
3. No major risk cardioembolic source of embolism‡
4. No other specific cause of stroke identified (eg, arteritis, dissection, migraine/vasospasm, and drug abuse)

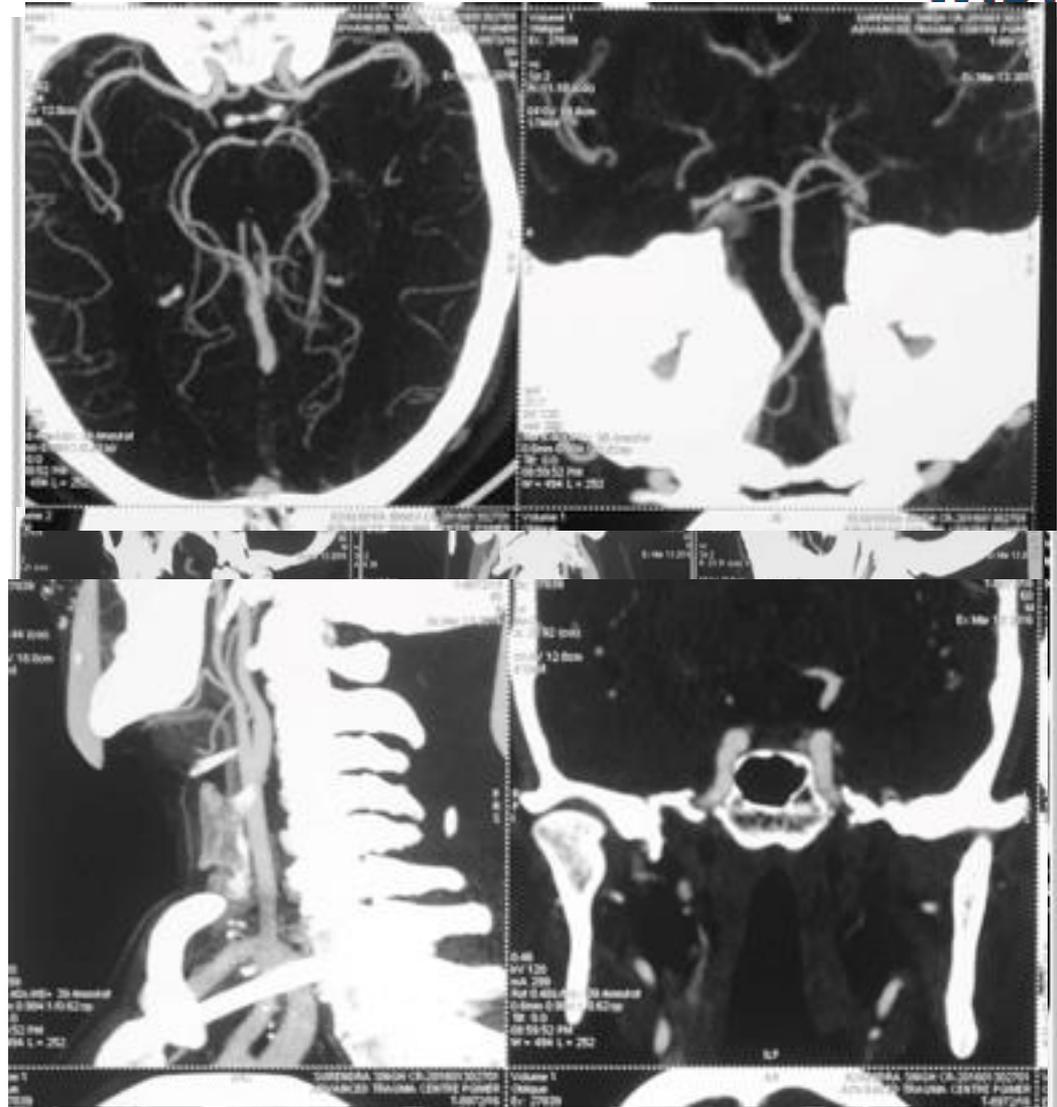
Causes





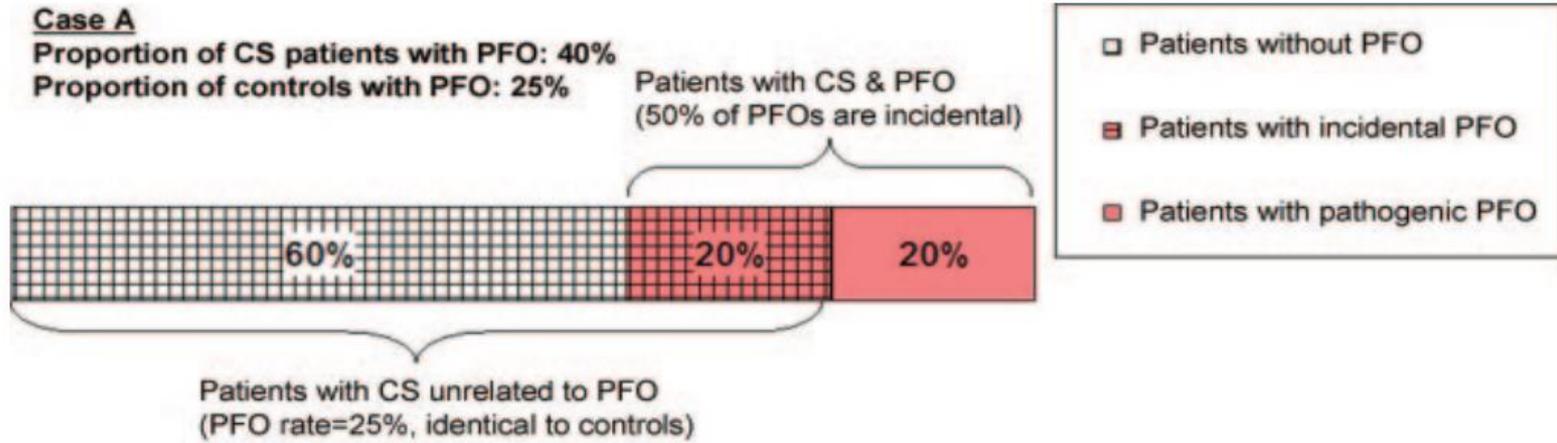
EVALUATION STRATEGY

- Brain Imaging (CT / MRI)
- Vascular imaging (CTA / MRA / Duplex / TCD)
- Echo (TTE / TEE)
- EKG/Holter
- Hematological evaluation





Cryptogenic stroke and PFO

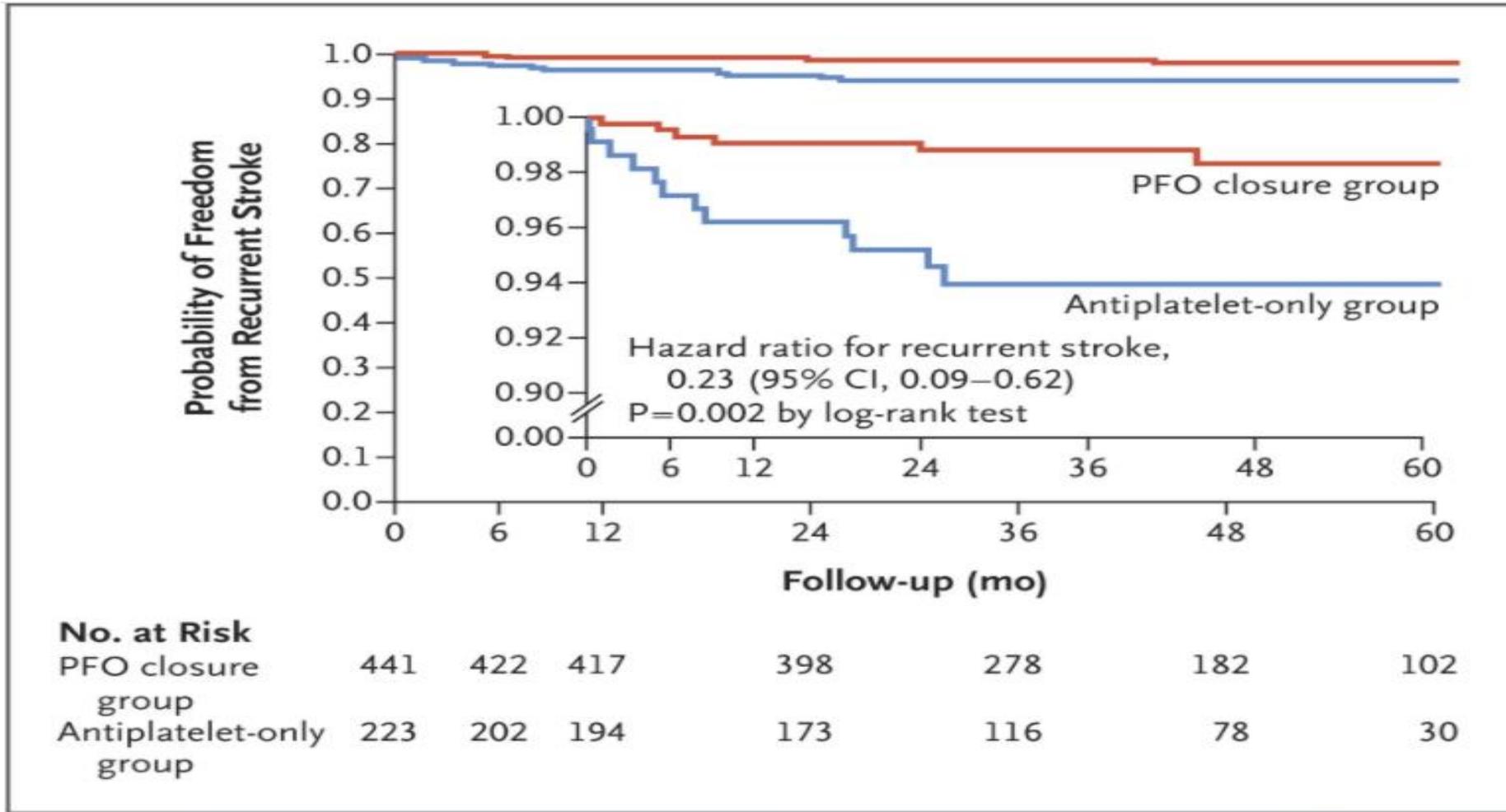


PFO Management

- ANTICOAGULTION for 3 months if DVT found.
- Antiplatelets
- PFO closure

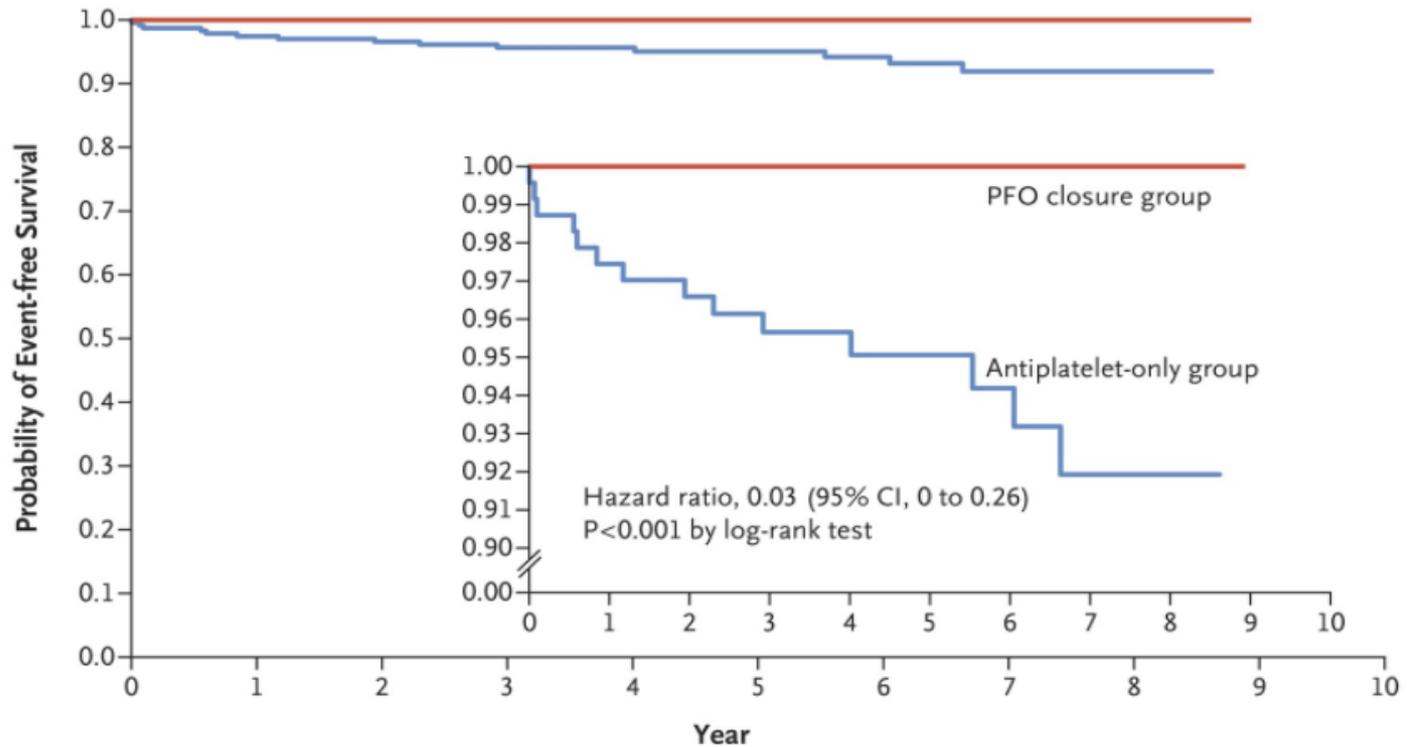


PFO: Management





CLOSE



No. at Risk

	0	1	2	3	4	5	6	7	8	9	10
PFO closure group	238	238	232	200	179	141	99	64	20	0	0
Antiplatelet-only group	235	229	223	198	160	130	96	55	19	0	0

Strong recommendation in favour of PFO closure plus antiplatelet therapy compared with antiplatelet therapy alone

- Weak recommendation in favour of PFO closure plus antiplatelet therapy compared with anticoagulants



APID RECOMMENDATIONS



Patent foramen ovale closure, antiplatelet therapy or anticoagulation therapy alone for management of cryptogenic stroke? A clinical practice guideline

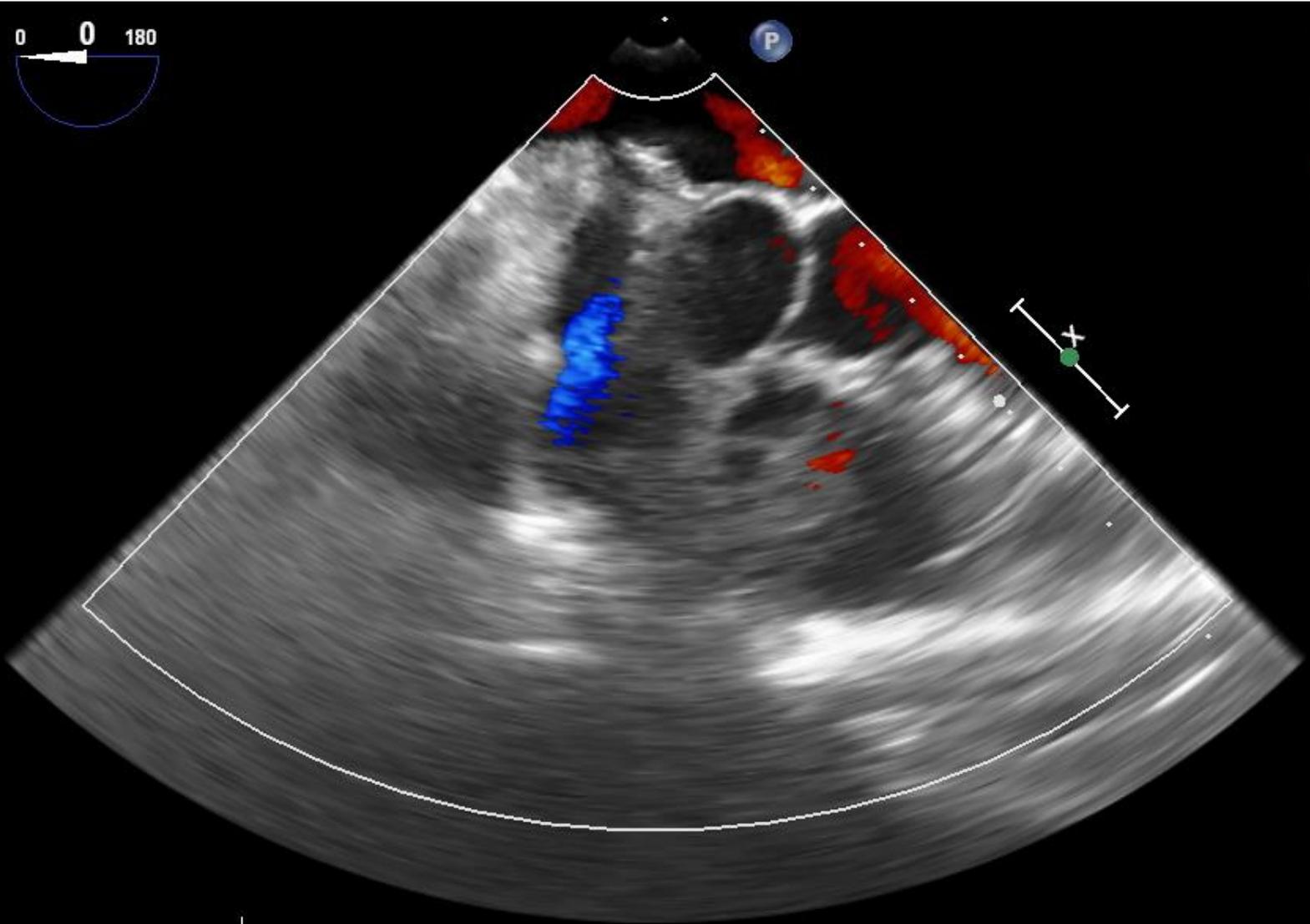
Ton Kuijpers,¹ Frederick A Spencer,² Reed A C Siemieniuk,^{3 4} Per O Vandvik,^{5 6} Catherine M Otto,⁷ Lyubov Lytvyn,² Hassan Mir,² Albert Y Jin,⁸ Veena Manja,⁹ Ganesan Karthikeyan,¹⁰ Elke Hoendermis,¹¹ Janet Martin,¹² Sebastian Carballo,¹³ Martin O'Donnell,¹⁴ Trond Vartdal,¹⁵ Christine Baxter,¹⁶ Bray Patrick-Lake,¹⁷ Joanie Scott,¹⁸ Thomas Agoritsas,^{3 19} Gordon Guyatt^{2 3}



2D
77%
C 50
P Off
Gen



CF
59%
4.4MHz
WF High
Med



Thank you for the patient
listening