



Cardiology Cathlab-Based Management of Thrombotic Carotid Stenoses in Acute Ischaemic Stroke en Route to a Full Interventional Stroke Service - Tools, Techniques, Local Stroke Unit Collaboration: Challenges and Patient Outcomes.

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Background: The CAS Program

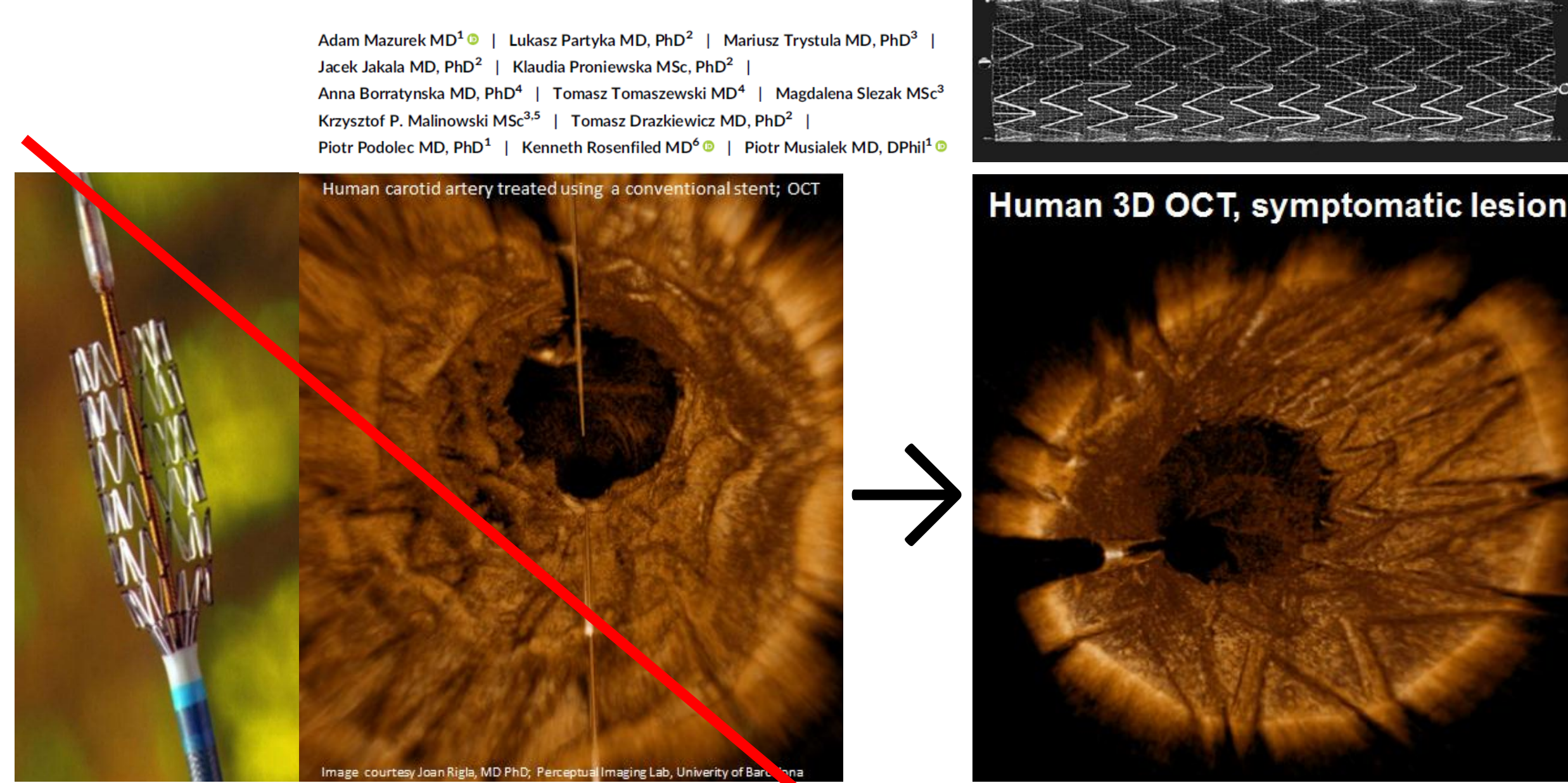
- > 100 CAS per year (within Team) unselected patients, including high lesion risk and high clinical risk
- All-comer patient treatment (all referrals registered)
- >50% symptomatic patients through a developed referral network including stroke neurologies
- High rate of proximal EPD use
- <5% CEA referrals
- ALL procedures (>600 in series) using the new generation MicroNet-covered stent to seal/eliminate the plaque
- Own + collaborative research culture

Novel PARADIGM in carotid revascularisation: Prospective evaluation of All-comer perCutaneous cArOTid revascularisation in symptomatic and Increased-risk asymptomatic carotid artery stenosis using CGuard™ MicroNet-covered embolic prevention stent system

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MicroNET-covered stents for embolic prevention in patients undergoing carotid revascularisation: twelve-month outcomes from the PARADIGM study

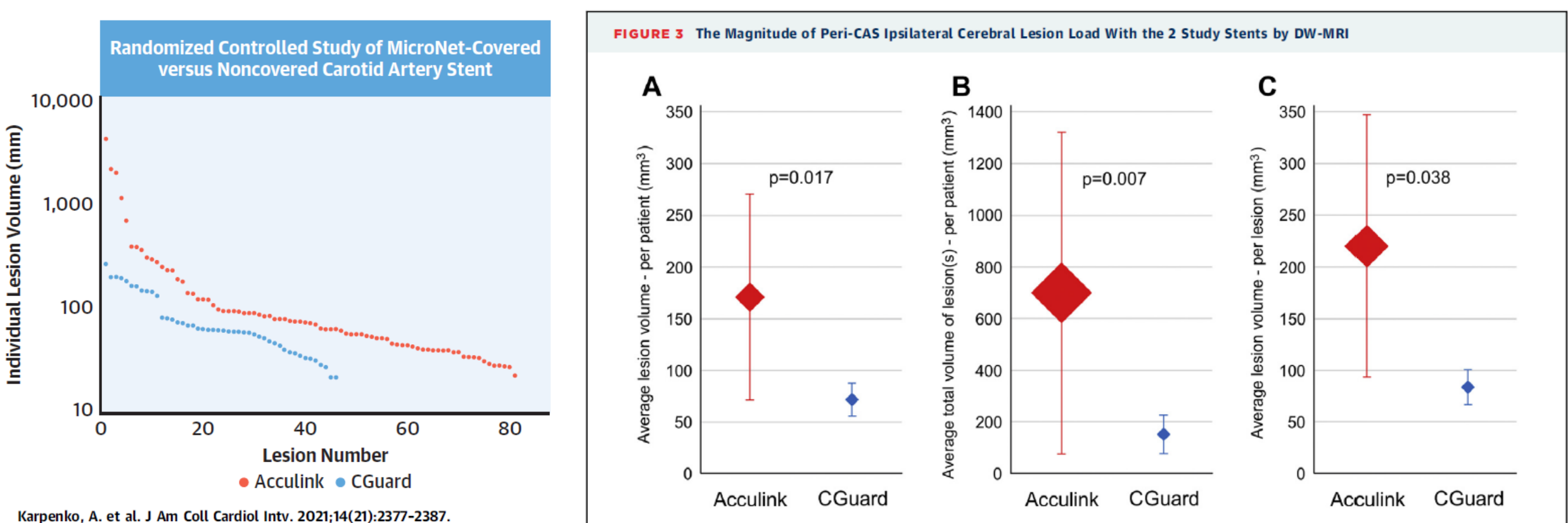
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Randomized Controlled Trial of Conventional Versus MicroNet-Covered Stent in Carotid Artery Revascularization

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Disclosures: PM has served as an Advisory Board member/Consultant for Abbott, Inspire MD and Medtronic, and he is a Proctor for InspireMD and Medtronic. PM is Polish Cardiac Society Board Representative for Stroke and Vascular Interventions



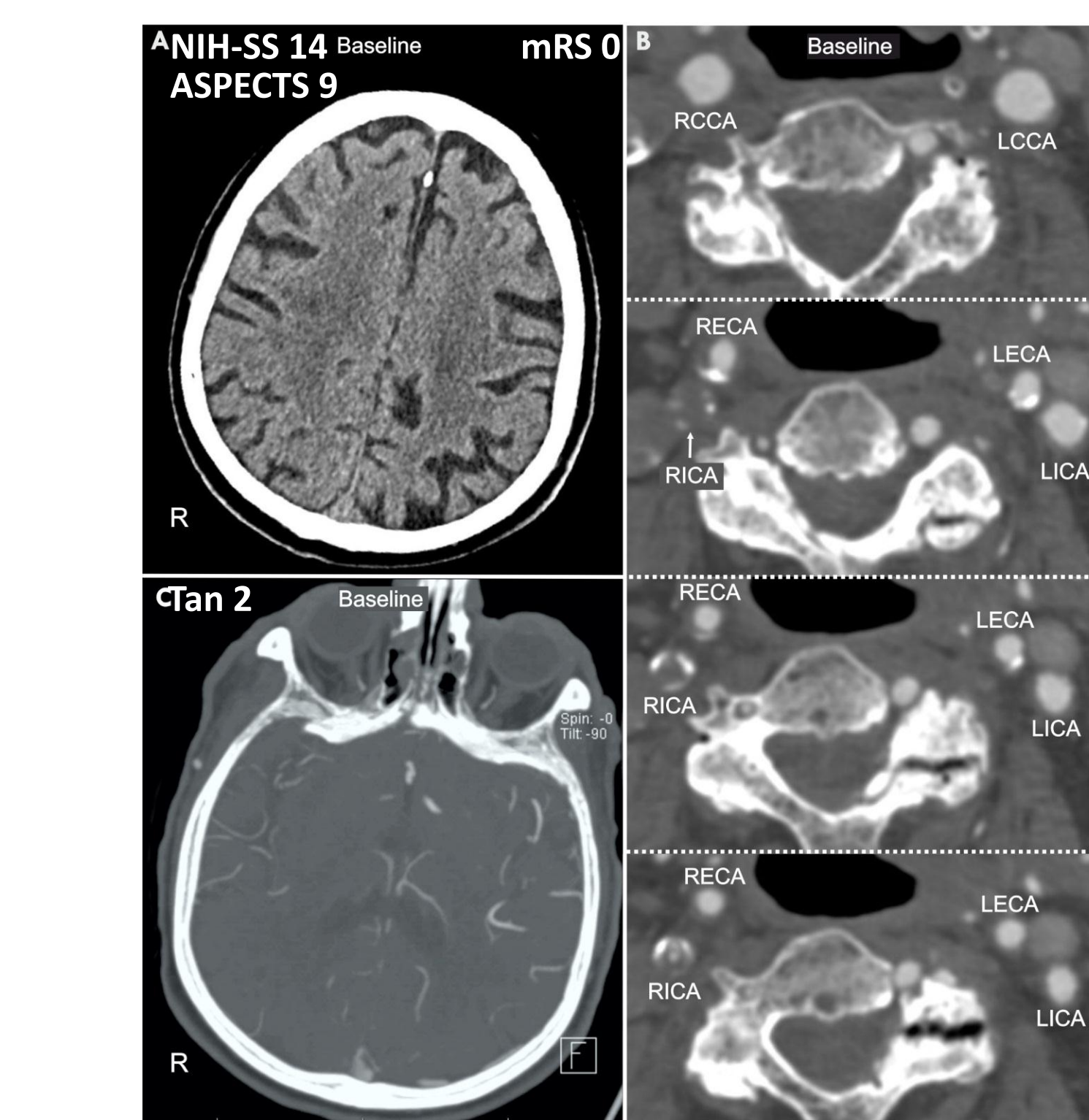
Principal achievement: Our Effective Evolution from High-volume elective CAS – with Best-in-New-Class, Plaque-Sealing Stent use under predominantly Proximal Neuroprotection, through Carotid Stenosis Stroke Emergent CAS, to Routine Stroke Thrombectomy

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Novel Large-Diameter Manually Expandable Stentriever, Embolic Prevention Stent and Flow Reversal in Large-Thrombus-Burden ICA Proximal Occlusion Stroke

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Patient Baseline Presentation



ABSTRACT TCT-76

Background

Shortage of endovascular operators able to deliver thrombectomy in acute ischemic stroke (AIS) on a 24/7/365 basis is a main challenge in health care settings around the world. Another fundamental barrier is getting multispecialty teams to work collaboratively with each other in AIS as already happens (albeit on an elective basis) in managing stroke mechanistic pathologies such as atrial fibrillation (pharmacology/ablation) or patent foramen ovale (diagnosis/closure).

Methods

Twenty-three patients (17 men, aged 58 to 83 years) with carotid-stenosis AIS were treated on emergent basis as part of our pathway toward a full 24/7 thrombectomy stroke service. All lesions (100%) were thrombotic (mobile thrombus: 30.4%; 3 were thrombotic total occlusions). Proximal neuroprotection (flow reversal using common carotid artery ± external carotid artery balloon; Mo.Ma [Medtronic] or FlowGate [Stryker]) with thrombus aspiration was used in 21 of 23 patients (91.3%); in 2 internal carotid artery total thrombotic occlusion TigerTrieverXL [Rapid Medical] was used). All procedures were done under activated clotting time control and employed a novel, plaque-sequestering MicroNET-covered embolic prevention stent system (CGuard, InspireMD,) that we routinely post-dilatation optimized.

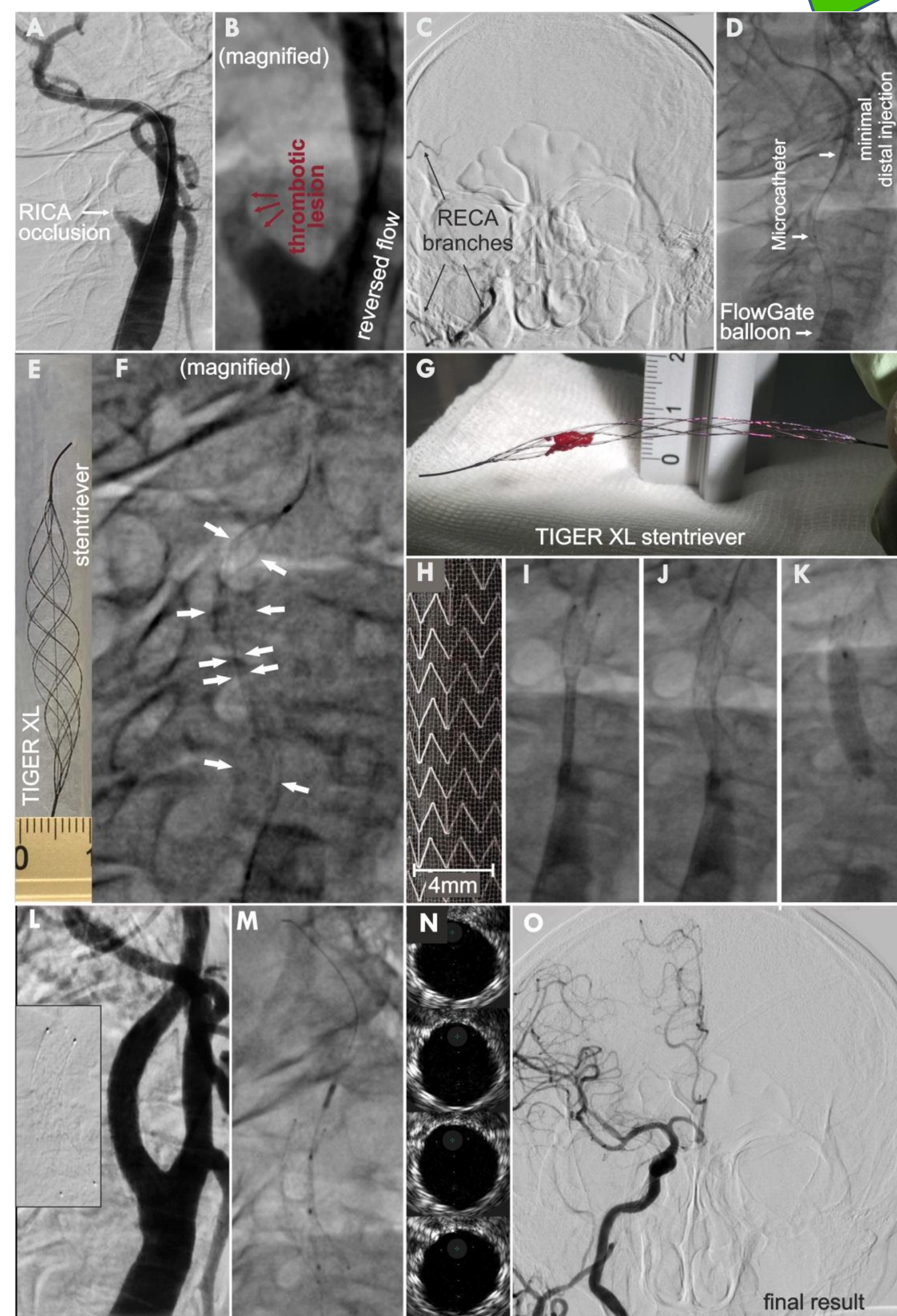
Results

There were no procedure- or device-related complications. Thrombolysis in Myocardial Infarction/Thrombolysis in Cerebral Infarction (TIMI/TICI)-3 was achieved in all cases. New embolism-to-infarct territory was 0% and embolism-to-new territory was 0%. Vascular access closure device use was 81%. A 30-day good clinical outcome (mRS of 0-2) rate was 95.3%. One patient with thrombotic near occlusion, in whom crescendo stroke episodes superimposed his late presentation necessitating treatment, had a hemorrhagic stroke transformation on day 2 that finally led to death. By 30 days, no new stroke, stent thrombosis, myocardial infarction, or other severe adverse event occurred.

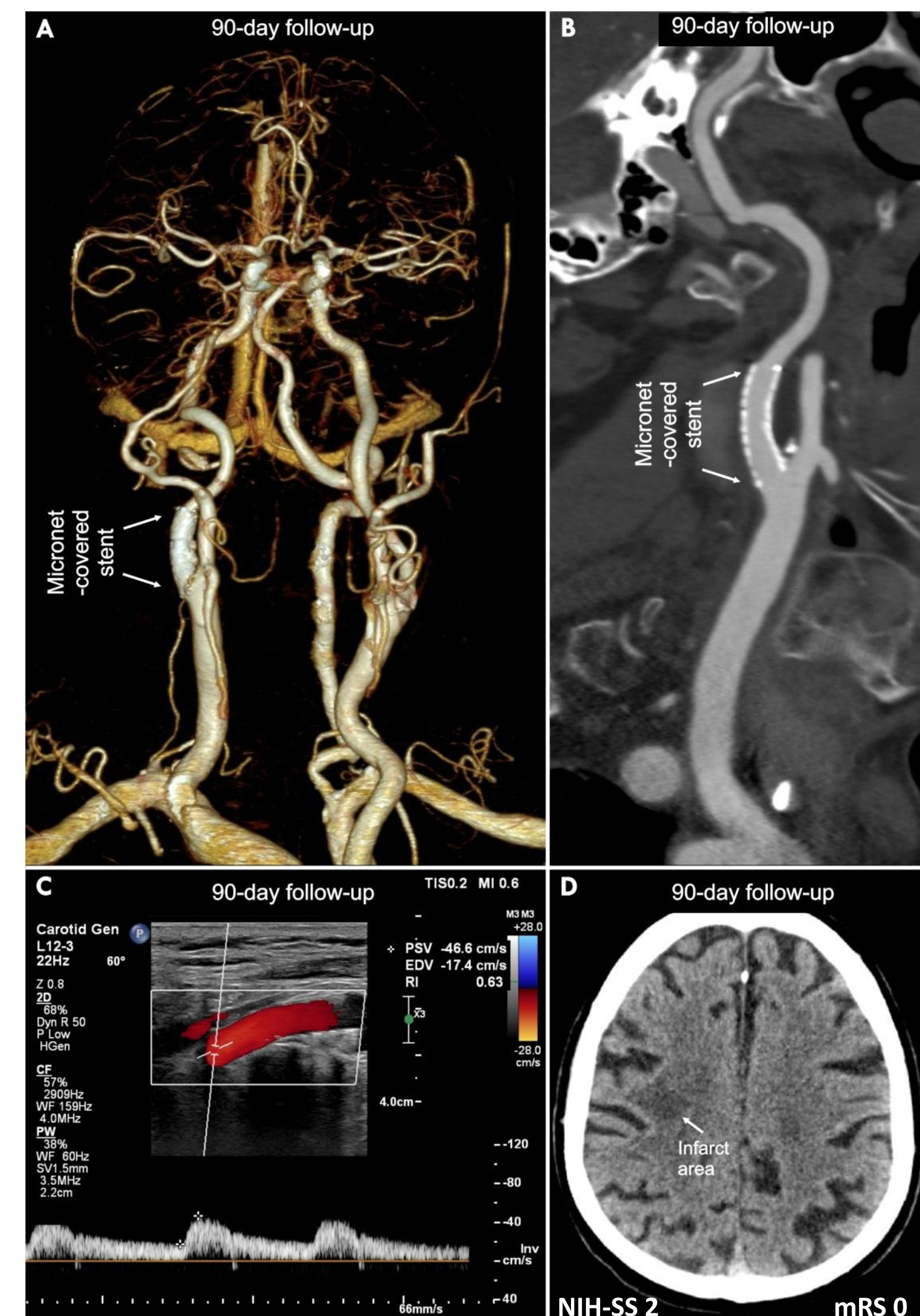
Conclusions

Cardiologists skilled in carotid interventions are naturally positioned to deliver AIS treatment. 24/7 acute myocardial infarction services and skills can be translated—in collaboration with local stroke neurology—to AIS as an effective health care solution for stroke patients currently needing—and not receiving—thrombectomy. Working hand in hand with stroke neurology and radiology in managing carotid-stenosis strokes presents a natural evolution toward full interventional stroke services, including thrombectomy.

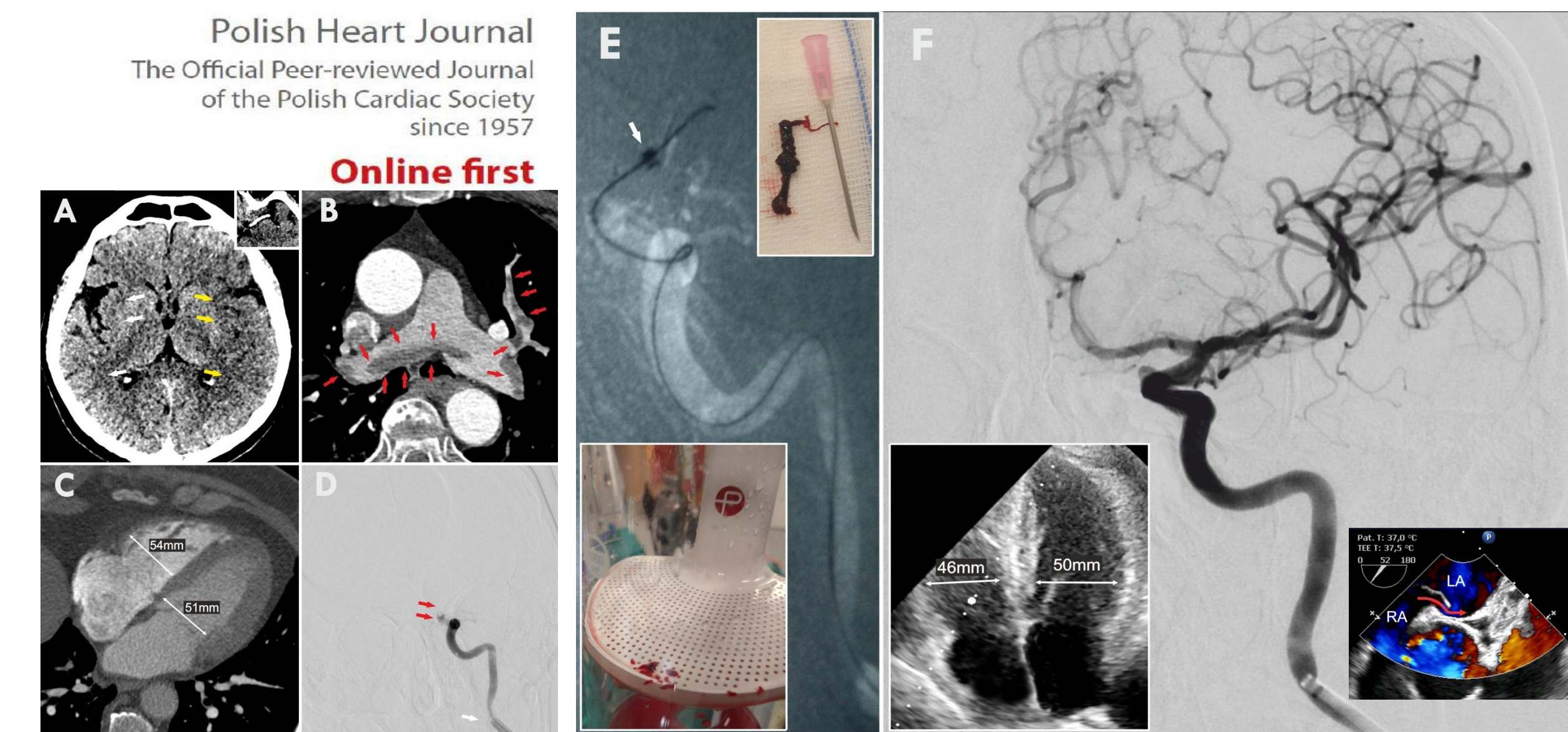
Cardiology Cathlab Procedure



90-day Follow-up



Thrombectomy-Capable Stroke Center (Level-2 Center)



Large-vessel occlusion, large thrombus burden acute stroke in acute pulmonary embolism: a single multi-specialty multi-skill team treatment optimization

Invited Special Review

Adv Interv Cardiol 2021; 17, 3 (65): 245–250

Interdisciplinary management of acute ischaemic stroke – current evidence on training requirements for endovascular stroke treatment. Position Paper from the ESC Council on Stroke and the European Association for Percutaneous Cardiovascular Interventions with the support of the European Board of Neurointervention: A step forward

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Steps FORWARD

of the 2021 ESC / European Board of Neurointervention document

- recognition of a large unmet need
- cardiologists 'can' treat strokes

Steps BACKWARD

- lack of the 'CAS PATHWAY' recognition
- unrealistic quota - 40 MTs needed before one 'can'

Key Messages

- Cardiologists skilled in carotid interventions are naturally positioned to deliver stroke interventions
- 24/7 acute MI services and skills can be translated—in collaboration with local stroke neurology—to MT service
- Working hand in hand with stroke neurology and diagnostic radiology (involvement, training!)