

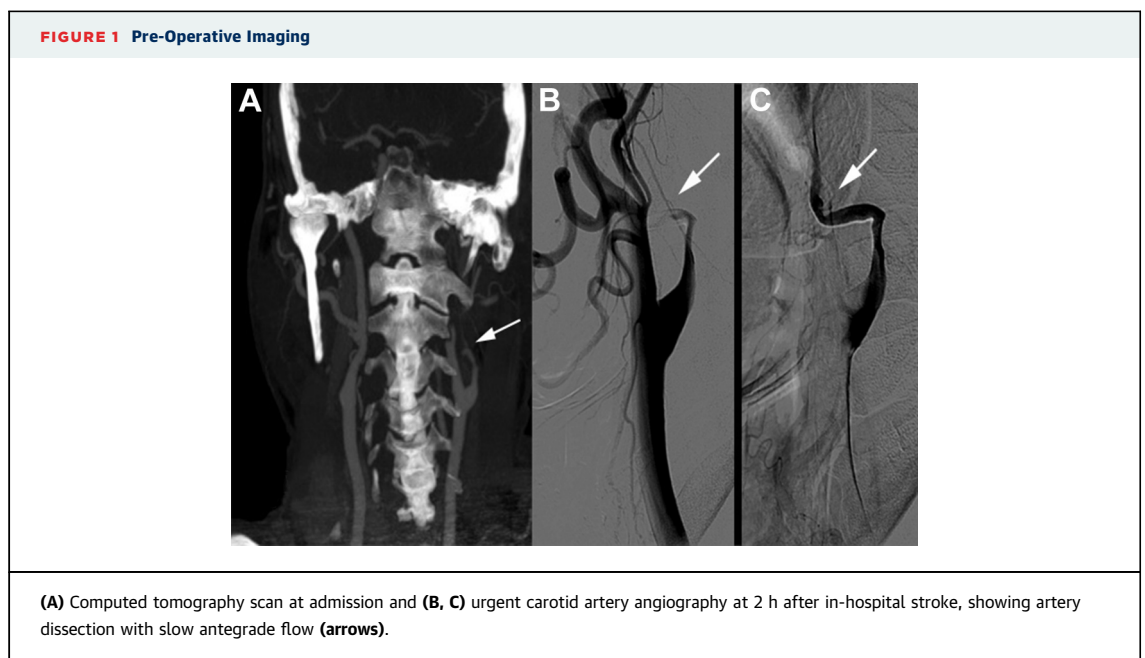
IMAGES IN INTERVENTION

Successful Endovascular Treatment of Unbenign Spontaneous Dissection of the Left Internal Carotid Artery Combining Advanced Carotid and Coronary Techniques



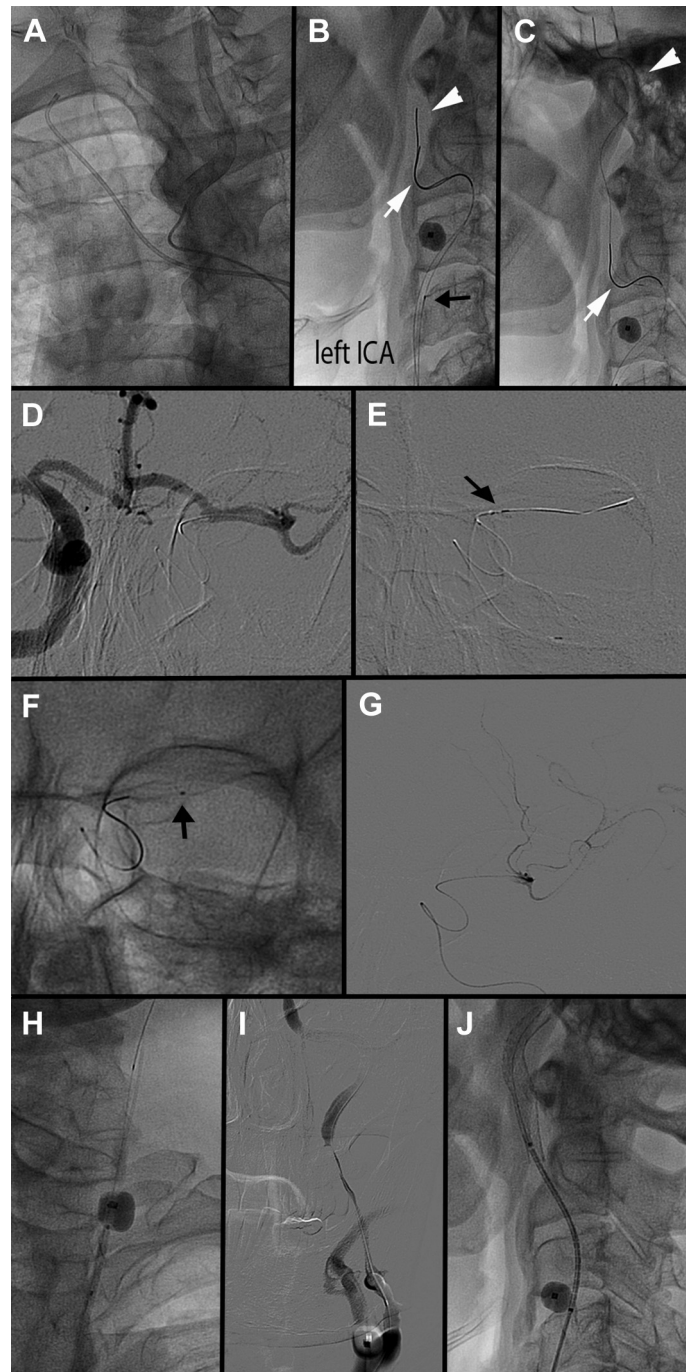
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A 62-year-old man was admitted for acute transient ischemic attack due to spontaneous dissection of proximal left internal carotid artery (ICA) (Figure 1A). Initially managed conservatively, 72 h later, the patient had a massive left hemispheric stroke (National Institutes of Health Stroke Scale (NIHSS) score of 22). After a discussion by the brain team (neurologist, vascular surgeon,

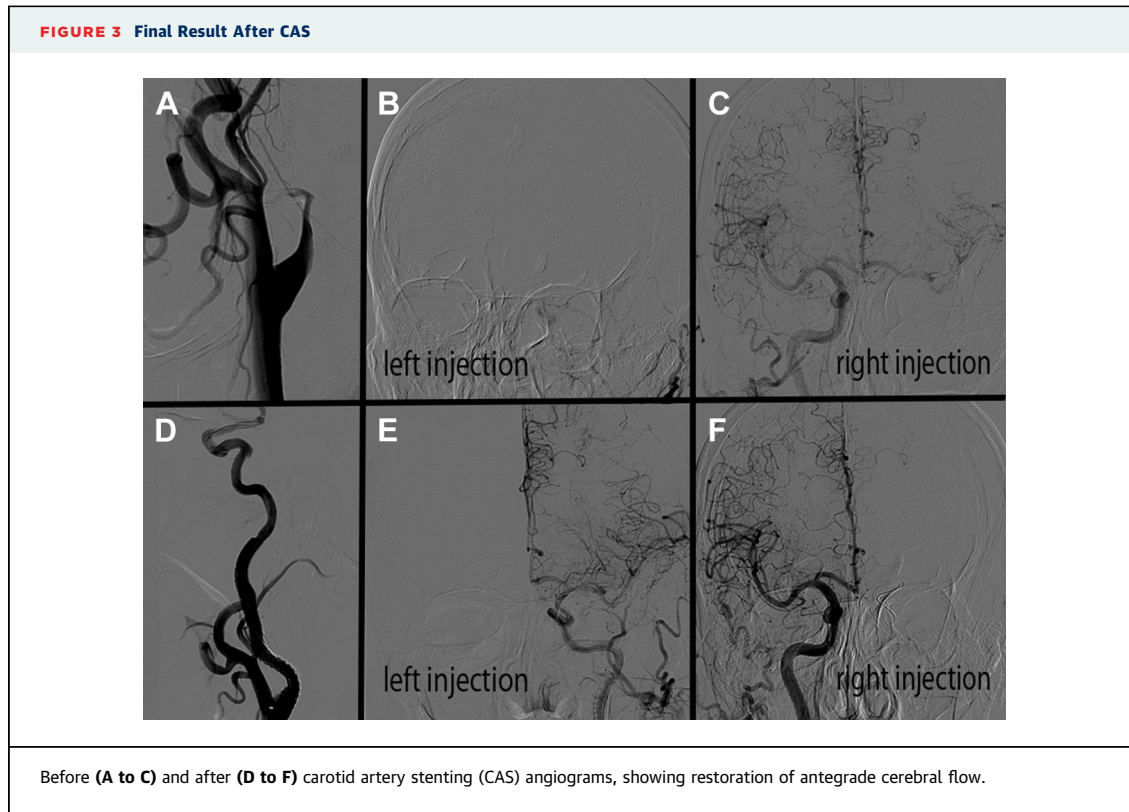


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FIGURE 2 Step-by-Step Carotid Artery Stenting

(A) Bilateral visualization using a diagnostic catheter in the right internal carotid artery. During proximal protection with flow blockage (Medtronic Invatec MoMa, Roncadelle, Italy), a standard 0.014-inch coronary wire was inserted in the dissection and could not be advanced further (**arrow**). A hydrophilic polymeric 0.014-inch wire (Fielder FC, Asahi-Intecc, Aichi, Japan) (**arrowhead**) over a coronary microcatheter (Finecross, Terumo, Tokyo, Japan) (**black arrow**) managed to re-enter the true lumen distally (**B, C**). **(D)** Wire progression was controlled by performing contralateral injections. Once the wire reached the midcerebral artery (**E**), the microcatheter was advanced (**F**), and the position was checked again with gentle injection of contrast medium (**G**). **(H)** The hydrophilic wire was exchanged for a standard one with a trapping balloon inside the MoMa catheter. After predilations with 3.5-mm balloons, 2 open-cell stents (Precise 7-40 mm, Cordis, Fremont, California) were deployed and post-dilated with a 5.5-mm balloon (**I, J**).



interventionist), urgent endovascular treatment to restore cerebral flow was planned. Angiography showed long occlusive dissection of the left ICA to the petrous sinus (Figures 1A to 1C) without adequate contralateral flow (Figures 1D and 1E). Carotid artery stenting combining proximal protection to avoid debris dislodgment and a parallel wire technique to re-enter to the true lumen distal to the dissection was successfully performed without complications (Figures 2 and 3). The neurological status improved

to NIHSS score of 3, with a modified Rankin Scale score of 2 at 60 days.

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