


# Double microcatheter reduction using partially deployed Atlas stents in treating a large dysplastic MCA bifurcation aneurysm with Y stent assisted coiling

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## ABSTRACT

Treatment of large dysplastic middle cerebral artery (MCA) aneurysms can be challenging.<sup>1,2</sup> Catheterization of M2 branches at hyperacute angles often requires an ‘around the world’ approach/microcatheter reduction, which can be accomplished with rapid pull,<sup>3</sup> balloon anchor,<sup>4</sup> and stent anchor<sup>5</sup> techniques. In this video [video 1](#), Atlas stents (Stryker) are used for double microcatheter reduction along with Y stent assisted coil embolization (Video 1). Steps include (1) catheterization of the more difficult M2 branch with ‘around the world’ maneuver; (2) reduction/stent deployment; (3) similar catheterization of the second M2 branch; (4) microcatheter reduction/stent deployment; (5) coil embolization (jailed). Important nuances include: (1) low threshold for a staged procedure; (2) awareness of the possibility of stent twisting; (3) jailed coiling. Final views show adequate treatment of the aneurysm dome with stent protection of the dysplastic neck without thromboembolic complications. Given the residual near the base, close angiographic follow-up is important.



**Video 1** Technical video demonstrating double stent reduction technique

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**Contributors** MG and JRM contributed equally. MG: acquisition of images and videos, creation of the video, revising, and final approval of the video. JL: performing the surgical procedure and final approval of the video. LB: drafting, revising, and final approval of the video. FAS: drafting, revising, and final approval of the video. JRM: performing the surgical procedure, acquisition of images and videos, narration, drafting, revising, and final approval of the video. All authors acknowledge that they are accountable for all aspects of the work.

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