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# Treatment of Azygos Anterior Cerebral Artery Aneurysm With an Intrasaccular Device

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A cerebral digital subtraction angiography performed on a 34-year-old male showed an azygos anterior cerebral artery, a rare anatomical variation present in approximately 0.4%–1% of the population [1, 2]. The angiography showed symmetrical proximal A1 segments and a single A2 segment; a saccular aneurysm was found at the bifurcation of the pericallosal arteries, in the transition toward the A3 segment, measuring 3.2 mm (neck) × 8.9 mm (neck-domus), with a neck-to-domus ratio of 1:2.7. The first approach considered was coiling assisted by Y-stenting, due to the relatively wide neck; however, this approach increases procedure duration, is technically more complex, and increases the risk of complications, such as bleeding due to the prolonged use of dual antiplatelet therapy. Given the configuration of the aneurysm, in a straight line from the A1 segment, the authors elected to use a Woven Endobridge (WEB SL 7.0 × 5.0 mm) device, an intrasaccular device consisting of a dense nitinol mesh that provides flow disruption, leaving the parent artery unaffected [3]. Afterwards, complete exclusion of the aneurysm from the circulation was observed (Figure 1). To the best of our knowledge, this is the first use of a flow disruption device to treat an aneurysm associated with the azygos anterior cerebral artery.

### Ethics Statement

The study was approved by the Research Ethics Committee of the Neurological Institute of Curitiba. Written informed consent was obtained from all participants in accordance with the Declaration of Helsinki.

### Consent

Written informed consent for publication of identifying clinical details and images was obtained from the patient. All efforts were made to ensure patient anonymity.

### Conflicts of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

The authors confirm that the data supporting the findings of this study are available within the article. Raw data that supports the findings of this study are available from the corresponding article, upon reasonable request.

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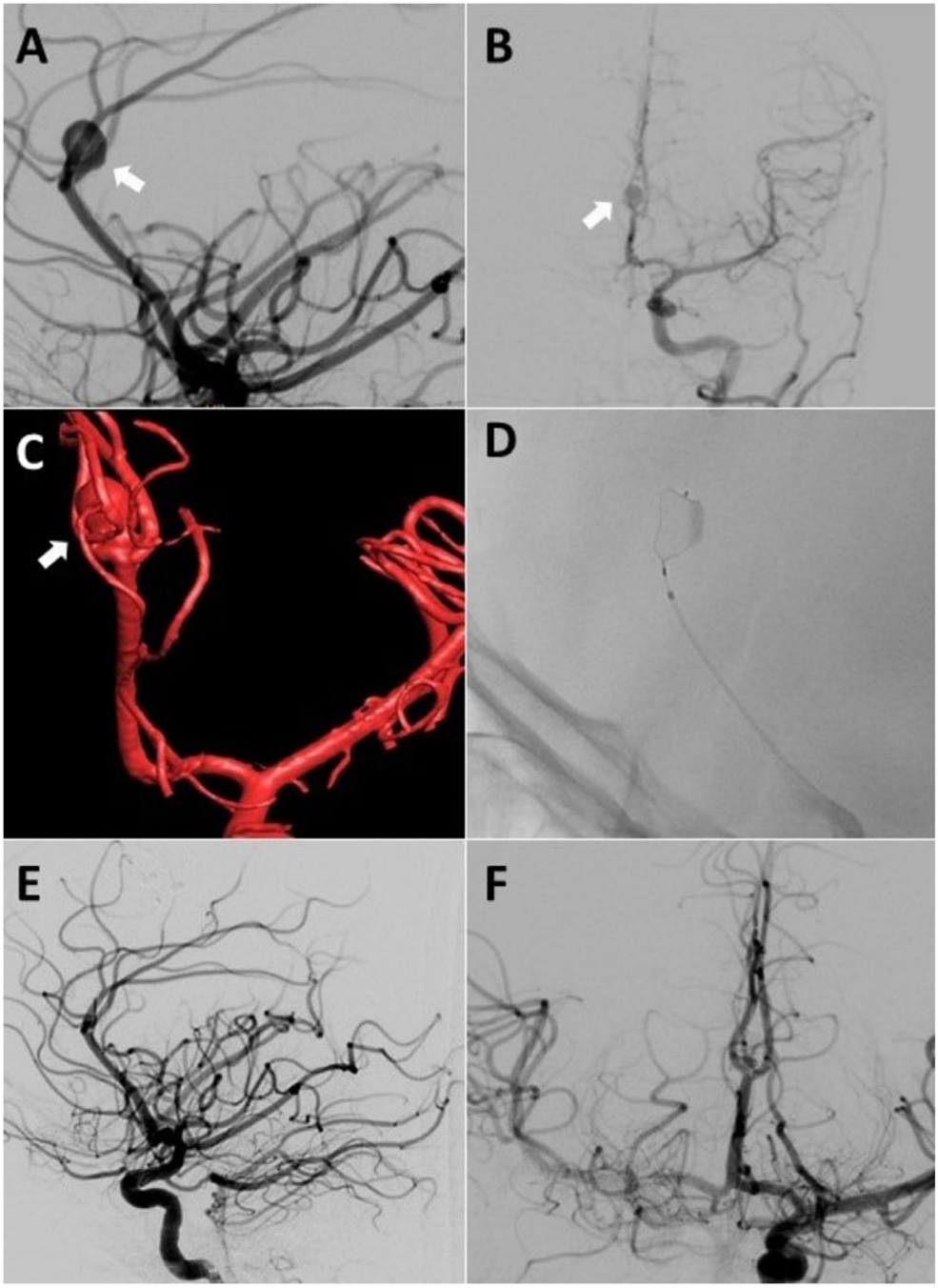


**FIGURE 1** | Digital subtraction angiography and endovascular treatment with flow disruption. Lateral (A) and frontal (B) views, showing the large single A2 trunk that characterizes the azygos anterior cerebral artery. A 3D reconstruction (C) showing the saccular aneurysm observed at the bifurcation into pericallosal arteries. WEB device positioned inside the aneurysm (D). Lateral (E) and frontal (F) views showing exclusion of the aneurysm from the circulation after treatment. White arrows: Indicate the aneurysm at the artery bifurcation.