Heart-shaped intracranial aneurysm

Aneurisma intracraniano em forma de coração

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A 45-year-old woman presented with severe headache for three hours. Non-contrast brain CT revealed subarachnoid hemorrhage, mostly in the prepontine cistern (Figure A). A catheter-based angiogram showed a heart-shaped aneurysm arising from the junction of the basilar artery and the left superior cerebellar artery (Figures B and C), which was then coiled uneventfully (Figure D).

Cerebral aneurysm with a heart-shaped configuration is interesting and extremely rare, which is usually associated with vessel-wall degeneration under hemodynamic stress¹. Surgical clipping is challenging because of the complex anatomic environment and fragile aneurysmal wall; while an endovascular procedure, as a straightforward option, seems to be feasible and effective².³.

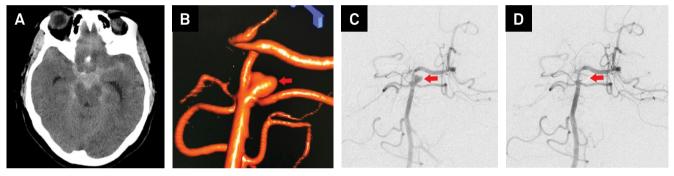


Figure. (A) Non-contrast head CT shows subarachnoid hemorrhage in the prepontine cistern. (B-C) Catheter-based angiogram shows a heart-shaped saccular aneurysm (arrows) originating from the bifurcation of the basilar artery and the left superior cerebellar artery. (D) Postoperative angiogram shows the aneurysm (arrow) coiled successfully.

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