Case Report

Journal of Current Medical Research and Opinion

CMRO 03 (04), 439–440 (2020) ISSN (O) 2589-8779 | (P) 2589-8760

The Spectrum of Audiovestibular Dysfunction with Down-Beat Nystagmus in Aneurisma Anterior Inferior Cerebellar Artery Territory Rupture

Ganjar Simakerti[*,†,1], Freedy L P Tambunan[1], Dian Komaladewi[2], Dian Komaladewi[2], Undang Ruhimat[2], Farhan Anwary

[1] *Resident Radiology Department, Faculty of Medicine Padjadjaran University- Hasan Sadikin General Hospital, Pasteur 38, West Java, Bandung,40161–Indonesia*

[2] *Staff Radiology Department, Faculty of Medicine Padjadjaran University- Hasan Sadikin General Hospital, Pasteur 38, West Java, Bandung,40161–Indonesia*

https://doi.org/10.15520/jcmro.v3i04.272

Accepted 31-03-2020; Received 22-03-2020; Publish Online 10-04-2020

Reviewed By: Dr. Negussie Sidemo
Department: Reviewer/CMRO

1 INTRODUCTION:

Rupture aneurysm of the distal anterior inferior cerebellar artery (AICA) is extremely rare with an incidence of 0.03-0.5% of all intracranial aneurysms [1]. We are reporting a case of ruptured dissecting distal AICA aneurysm with spontaneous resolution. Isolated acute vestibular syndrome remains a diagnostic challenge in the emergency department and the initial approach should include the identification of a central or peripheral etiology [2] .

2 CASE REPORT:

A 42-year-old male patient developed sudden hearing loss in the right ear and vertigo. He also complained for 12 days of feeling very severe headaches, sometimes feeling nausea and vomiting, then taken to the hospital. On examination in getting high blood pressure accompanied by positive neck stiffness and down beat nystagmus. On CT Angiography, aneurysm is accompanied by rupture of the right anterior-inferior cerebellar artery.

3 DISCUSSION:

Anterior inferior cerebellar artery (AICA) usually arises from the caudal third of the basilar artery and supplies the inner ear, facial and vestibulocochlea nerves, lateral pons, middle cerebellar peduncle and anterior cerebellum. Rupture Aneurysms of the anterior inferior cerebellar artery (AICA) are relatively rare among intracranial aneurysms. They can occur in 1 of 3 regions of the AICA: 1) craniocaudal (high or low riding), 2) mediolateral-premeatal (proximal), and 3) meatal-postmeatal (distal) [3]. Patients with distal AICA dissecting aneurysms may present symptoms and signs of typical SAH, with sudden severe headache, meningismus, nausea, vomiting, photophobia, and/or coma. More localizing presentations may be seen, especially in larger aneurysms with mass effect, tinnitus, hearing loss, vertigo, gait ataxia, diplopia, facial paresis and lower cranial nerve palsies [4]. Figure 1

4 CONCLUSION:

Peripheral AICA ruptured dissecting aneurysm is a very rare disease and little information is available regarding its management. Parent artery occlusion may be proposed as a therapeutic alternative. When performing the occlusion by superselective embolization an excellent anatomic result and clinical outcome can be achieved.

REFERENCES

1. Singh S, Mittal RS, Purohit D, Shekhawat J. Spontaneous resolution of ruptured dissecting anterior inferior cerebellar artery aneurysm: A rare case report. Asian J Neurosurg. 2017;12(3):570–572. doi:10.4103/1793-5482.145561

2. Wegmann-Vicuña, Ricardo, et al. "Acute vestibular syndrome with down-beat nystagmus as a sole clinical presentation in AICA transient ischemic attack with an uncommon clinical course." Acta Oto-Laryngologica Case Reports 2.1 (2017): 131-136.

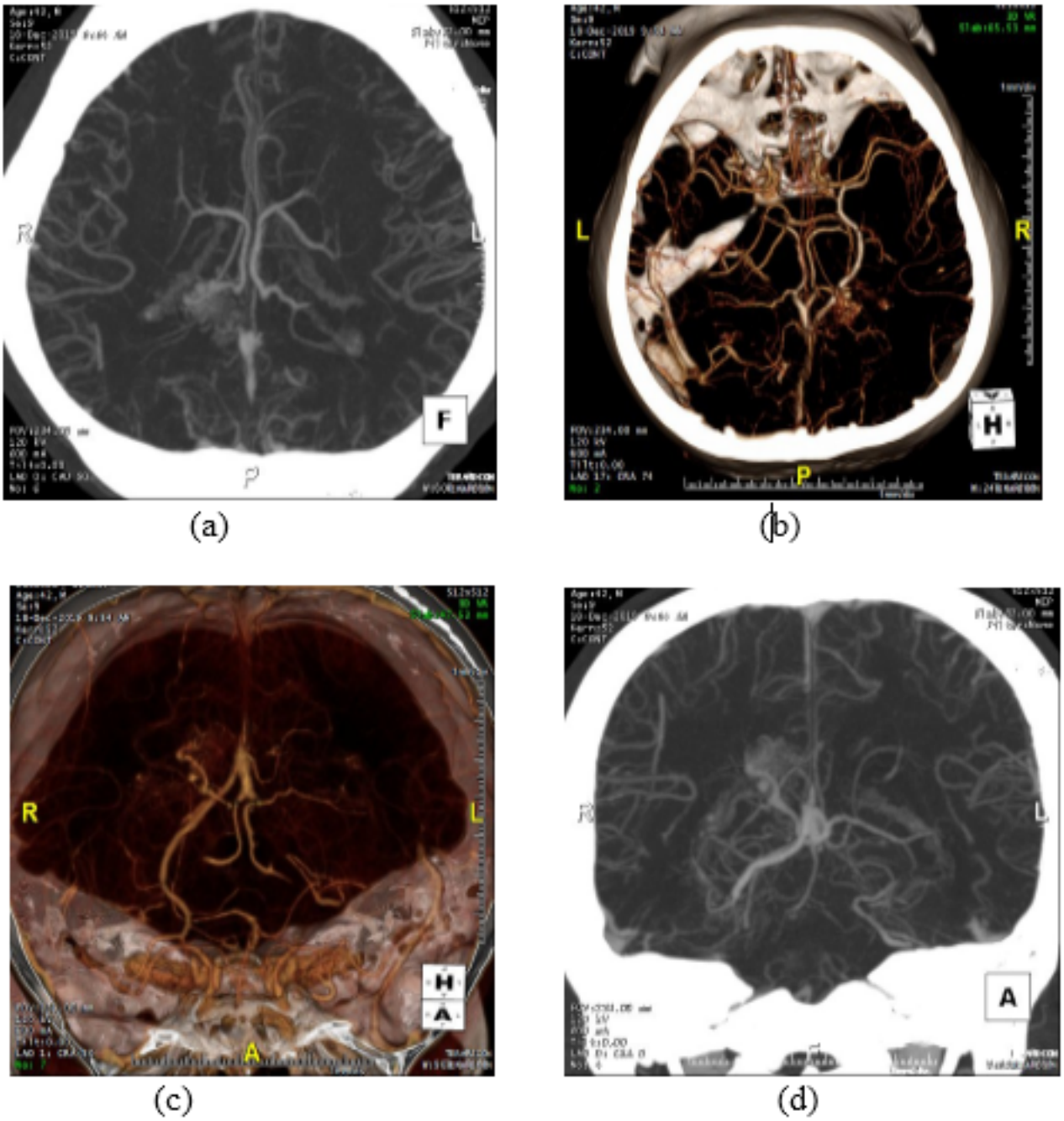

Figure 1. (a,b) axial, (c,d) coronal CT Angiography,aneurysm is accompaniedby rupture of the right anterior-inferior cerebellar artery.

3. Rodríguez-Hernández, Ana, et al. "Distal aneurysms of intracranial arteries: application of numerical nomenclature, predilection for cerebellar arteries, and results of surgical management." World neurosurgery 80.1-2 (2013): 103-112.
4.Hancock, J. H., and J. S. Millar. "Spontaneous dissection of the anterior inferior cerebellar artery." Neuroradiology 42.7 (2000): 535-538.