



Reversible Cerebral Vasoconstriction Syndrome: An Important Differential Diagnosis in the Severely Hypertensive Post-Partum Woman

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BACKGROUND

- Severe hypertension (> 170/110mm Hg) in post-partum women is a medical emergency due to increased risk of cerebral haemorrhage
- Beyond pre-eclampsia, Reversible Cerebral Vasoconstriction Syndrome (RCVS) must also be considered
- RCVS is characterised by temporary narrowing of multiple cerebral arteries and may present with thunderclap headache, hypertension, and focal neurological deficits¹
- RCVS can be associated with pregnancy and is an important differential to consider in this population.

AIM

To provide insight into the clinical presentation and management of RCVS as an uncommon cause of severe hypertension in the post-partum woman.

IMAGES



IMAGE 1: DSA showing smooth tapered narrowing followed by dilated segments of the right anterior & middle cerebral artery.

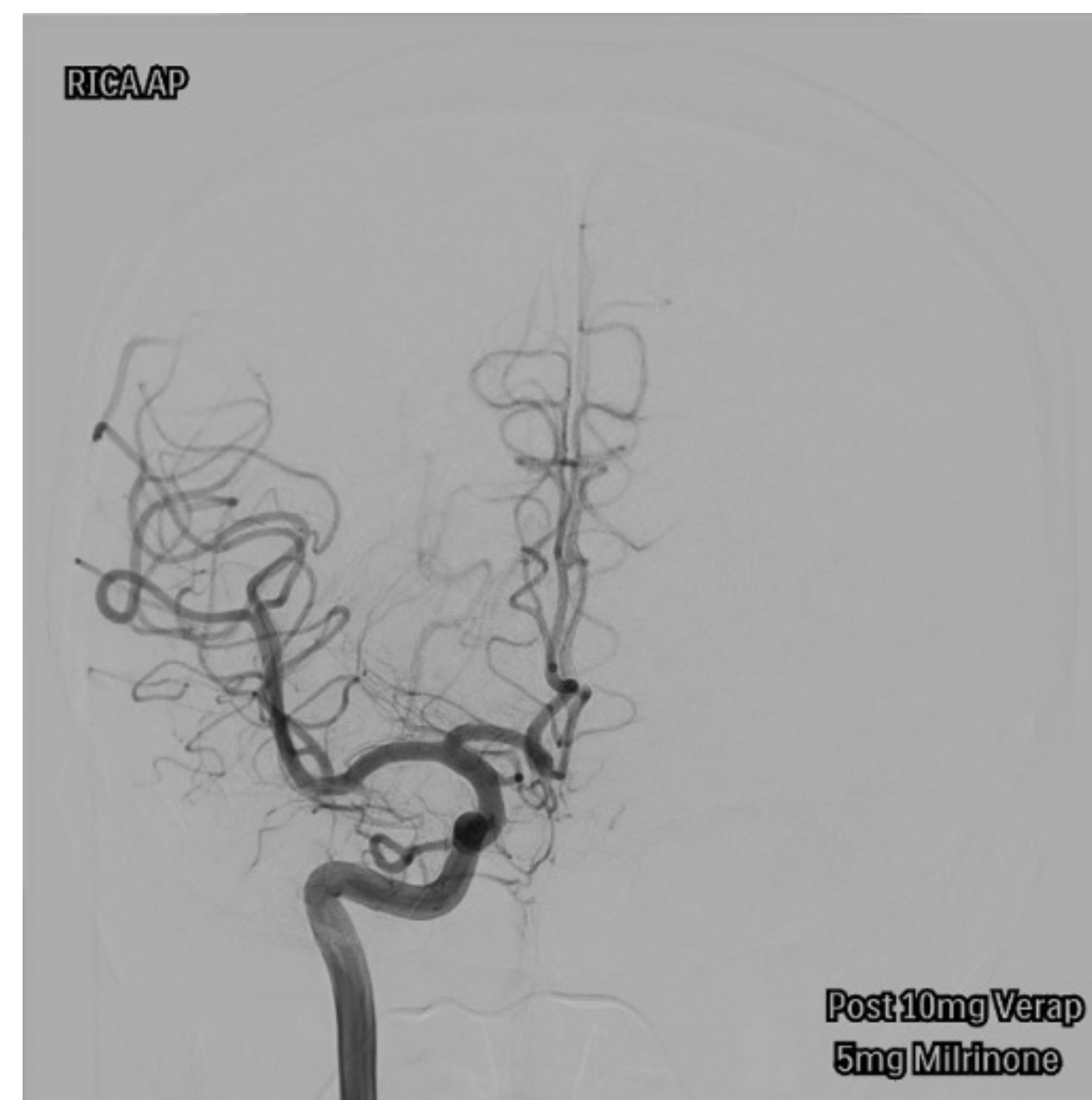


IMAGE 2: DSA post injection of verapamil 10mg and milrinone 5mg into right internal carotid artery, demonstrating reversibility

CASE

We describe a case of a multiparous woman 11 days post an uncomplicated elective caesarean section. She presented with left facial droop, left arm sensory and motor changes and dysarthria. Her prodrome was characterised by intermittent headaches and confusion. The patient was hypertensive, which was managed with intravenous labetalol and hydralazine. The initial impression was an atypical presentation of pre-eclampsia. CT stroke imaging demonstrated bilateral parietal subarachnoid haemorrhages. Subsequent MRI demonstrated multifocal narrowing of the cerebral arteries, suspicious of RCVS, which was confirmed on cerebral angiogram. There was no biochemical evidence of pre-eclampsia.

RESULTS

Diagnosed RCVS

Discharged on calcium
channel blockers for 3
months

Full neurological
recovery at 2 month
follow up

DISCUSSION

- RCVS is rare and typically self-limiting
- Assessing secondary causes in hypertensive post-partum women is imperative.
- Prompt initiation of antihypertensive treatment to manage the risks of haemorrhagic stroke and permanent deficits is key.

REFERENCES

1. Calabrese, L. H., Dodick, D. W., Schwedt, T. J., & Singhal, A. B. (2007). Narrative review: reversible cerebral vasoconstriction syndromes. *Annals of internal medicine*, 146(1), 34-44.