Reviewer’s report

Title: Unilateral thalamic infarction presenting as vertical gaze palsy

Version: 2 Date: 12 May 2011

Reviewer: rodica mardari

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

I have a few suggestions for this manuscript:

Case Report

1. Stenosis of the right vertebral artery at the C4 transverse foramen secondary to extrinsic osteophyte compression was seen on magnetic resonance angiography and confirmed by catheter angiography.

2. Transesophageal echocardiogram revealed an ejection fraction of 55% with no atrial or ventricular thrombus nor intracardiac shunt.

Discussion
1. “The medial thalamus is supplied by perforating branches arising from the basilar communicating artery and posterior cerebral arteries. The midbrain is spared because the superior and inferior paramedian mesencephalic arteries arise separately from each other from the basilar communicating artery or P-1 segment of the posterior communicating artery (6).”

Please review this piece, there are contradiction.
P-1 segment of the posterior communicating artery does not exist. The basilar communicating artery is a P1 segment of the posterior cerebral artery.

2. The mechanism of vertical gaze paresis with unilateral lesions is uncertain but we can speculate on the possibility of decussation of the frontobulbar fibers in the medial thalamus, as suggested in a case series of thalamic infarctions presenting as vertical gaze palsies (9).

3. The combination of vertical gaze paresis and skew deviation, previously believed to be pointing to a brainstem lesion, may now be attributed to a broader spectrum of anatomical areas.

**Quality of written English:** Needs some language corrections before being published

**Declaration of competing interests:**

I declare that I have no competing interests