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## Spontaneous intradural cerebral artery dissection: Spectrum of clinical presentations and correlation with angiographic findings

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**Aim:** Aim of this study was to analyze the distribution of spontaneous intradural cerebral artery dissection in angiographically with the symptomatology of admitted patients to our hospital.

**Materials & Methods:** We analyzed retrospectively collected data of the stroke patients' with 4-vessels angiogram in our institute from January 2013 to June 2014. Out of 164 of cerebral dissections in angiographic pattern, we found only 16 patients of intradural dissecting aneurysms that were included in this study. The male-female ratio was 37.5:62.5 and the mean age was  $47.56 \pm 13.19$  years. According to the angiographic finding depicting the location of the dissection plane in the arterial wall, we categorized to steno-occlusive, aneurysmal and combined (steno-occlusive and aneurysmal) pattern. In each dissection pattern, we evaluated presenting symptoms and presence of subarachnoid hemorrhage (SAH), infarction and intracerebral hemorrhage (ICH) or combined.

**Results:** The most common symptomatic presentation was headache (75%), followed by neck pain (50%), motor weakness of limb(s) (43.8%) and loss of consciousness (LOC) (37.5%). The most common angiographic pattern was aneurysmal patterns (68.75%) followed by steno-occlusive (18.75%) and combined (12.5%) patterns. Aneurysmal pattern was most frequently related to SAH (7/11, 63.63%) in contrast to steno-occlusive pattern was only related to infarction (3/3, 100%). The most frequent dissections were in the intradural vertebral arteries (IV) and posterior cerebral artery (PCA), presented with SAH 80% (4/5) and 33.33% (1/3), respectively. Infarction was common abnormality in patients with the intradural carotid arteries (IC) 33.33% (1/3), superior cerebellar artery (SCA) 33.33% (1/3) and basilar artery (BA) 33.33% (1/3) each whereas ICH was common abnormality in patients with the posterior inferior cerebellar artery (PICA) 50% (1/2).

**Conclusion:** The most common symptomatology of intradural cerebral artery dissection are headache and neck pain followed by motor weakness of limbs and LOC. SAH with aneurysmal pattern, in the posterior circulation, especially in the IV is the most frequent diagnosis which requires combined analysis of angiographic pattern and clinical presentations of stroke.

### Biography

Aminur Rahman has completed his MD from Sir Salimullah Medical College Mitford Hospital, University of Dhaka, Bangladesh. He is an Assistant Professor, National Institute of Neurosciences and Hospital, Sher-e Bangla Road, Bangladesh. He has published more than 15 papers in reputed journals and author of many neurology books.

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