Recurrent artery of Heubner

Heubner's artery (also known as the recurrent artery of Heubner or Medial Striate A.), named after the German paediatrician Johann Otto Leonhard Heubner is a branch from the anterior cerebral artery, typically from the proximal A2 segment or distal A1 segment, or at the level of the optic chiasm.

Recurrent artery of Heubner is responsible for supplying the inferior part of the caudate nucleus head as well as the adjacent anterior limb of the internal capsule and the subfrontal white matter, as well as parts of the putamen and septal nuclei.

From Heubner’s artery, on average four deep perforators arise, having diameters similar to those of the lenticulostriate branches of MCA.

Heubner's artery is the distal part of the medial striate artery.

In cases of obstructed flow in the Heubner's artery, the individual may experience infarction in those subcortical areas and thus hemiparesis. More proximal portions of the medial striate artery may cause spastic paraparesis and sensory loss contralateral to the lesioned side. Urinary incontinence and gait apraxia are also not uncommon findings.

Of note, occlusive damage to the medial striate artery may also present with contralateral grip reflex issues, and symptoms of Dysexecutive Syndrome. Contralateral gaze preference with or without transcortical motor aphasia may present in instances where the left hemisphere is affected in this type of occlusion.

Its recognised in 12 % of the hemispheres of the present series of neurological patients studied with DSA [1].

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Impiombato FA, Baltsavias G, Valavanis A. The recurrent artery of Heubner in routine selective cerebral angiography. Neuroradiology. 2014 May 31. [Epub ahead of print] PubMed PMID: 24878595.