Capillary Telangiectasia

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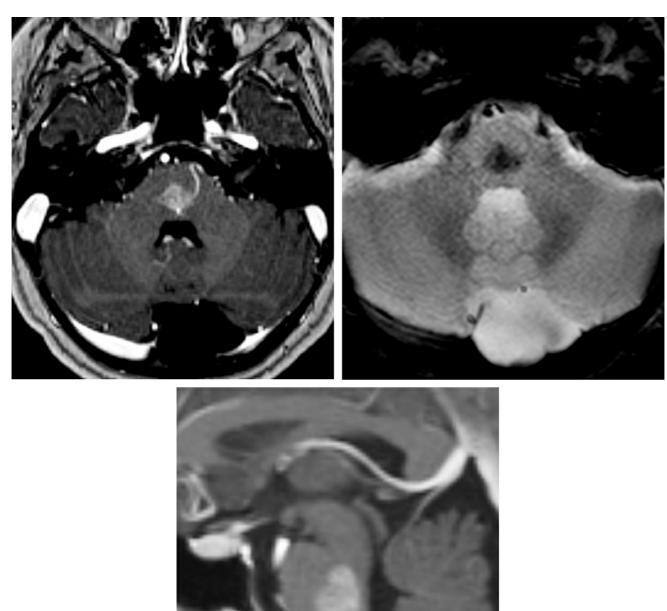


Figure 1: Capillary telangiectasias of the CNS are asymptomatic/subclinical, low-flow vascular lesions. The lesion is characterized by dilated capillaries interspersed within normal

parenchyma (in contrast to cavernous malformations which have no normal interposed parenchyma). The vast majority occur as incidental findings within the pons, cerebellum and/or spinal cord as a small focus of enhancement on MRI. There is an association with Osler-Weber-Rendu syndrome. The lesion becomes important in the differential diagnosis of vascular lesions, though atypical lesions can mimic glioma, metastasis, and/or demyelinating plaque.

Imaging

- CT
 - Usually not visible on CT, before or after contrast administration
- MRI
 - Findings
 - The lesion is nearly always detected on MRI versus other modalities
 - T1
 - If visible, may be lower in signal intensity than surrounding parenchyma
 - T2/FLAIR
 - Normal or with subtly increased signal intensity
 - T2* GRE, SWI
 - Hypointense signal (blooming susceptibility artifact related to deoxyhemoglobin)
 - T1WI C+
 - Small focal blush enhancement without mass effect
 - Enhancement may appear as "stipled" or as "paintbrush"
 - MRA
 - Usually normal (angiographically occult)
- Pitfalls
 - Atypical lesions may mimic pathology

For more information, please see the corresponding chapter in

Radiopaedia.

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REFERENCES

Barr RM, Dillon WP, Wilson CB.Slow-flow vascular malformations of the pons: capillary telangiectasias? *AJNR Am J Neuradiol* 1996; 17:71-78

- Lee RR, Becher MW, Benson ML, Rigamonti D. Brain capillary telangiectasia: MR imaging appearance and clinicohistopathologic findings. *Radiology* 1997; 205:797-805
- Huddle DC, Chaloupka JC, Sebgal V.Clinically aggressive diffuse capillary telangiectasia of the brain stem: a clinical radiologic-pathologic case study. *AJNR Am J Neuroradiol* 1999; 20:1674-1677