



Symptomatic cerebral capillary telangiectasias requiring surgical resection

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Introduction

Cerebral capillary telangiectasias are thin-walled capillaries surrounded by normal brain parenchyma. These lesions have been known to follow a benign course and have a proclivity for pons. However, these telangiectasias, when confluent and cortical, can cause significant debilitating symptoms for patients requiring surgical resection.

Methods

Retrospective review of all vascular cases encountered at Boston Children’s Hospital from 1993 to 2014 was performed, in addition to the review of the senior author’s database for the last three decades. Clinical presentation, exam findings, imaging studies, operative notes, and follow-up visits were reviewed. Symptomatic cerebral capillary telangiectasias requiring surgical resection were isolated.

Results

We found four cases of symptomatic cerebral capillary telangiectasias. These patients presented with symptoms that include seizures, focal neurologic deficits, and headaches. All had an underlying cavernous malformation. These vascular lesions were resected with good clinical outcomes.

Learning Objectives

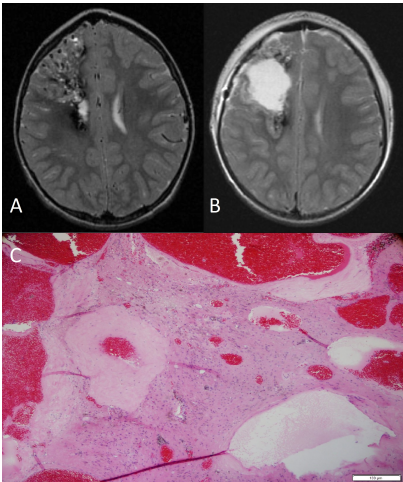
By conclusion of this presentation, participants should be able to recognize that:

- 1) capillary telangiectasias may be cortical, confluent, and cause significant symptoms for the patient;
- 2) symptomatic confluent cortical telangiectasias can be safely resected with good clinical outcome.

Conclusions

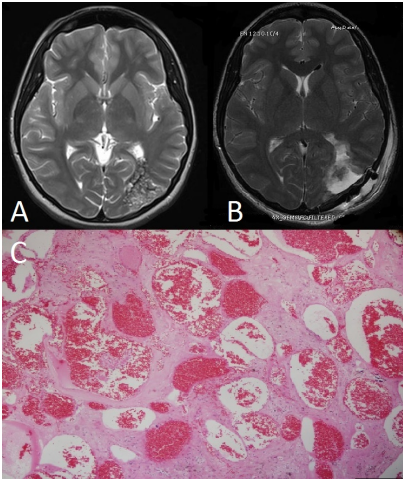
Confluent cortical capillary telangiectasias may be associated with underlying cavernous malformations. These telangiectasias can lead to chronic debilitating symptoms that can be

Patient 1



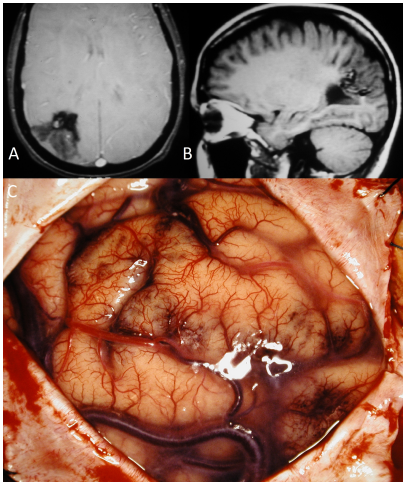
This 4-year-old boy presented with focal seizures involving left extremities. The right frontal lesion was initially watched, but the boy returned with hemorrhage and left sided weakness, prompting surgery. A) T2 MRI Preop; B) T2 MRI Postop; C) 4x Magnification. Thick and thin walled vessels with intervening brain, hemosiderin laden macrophages, reactive gliosis

Patient 2



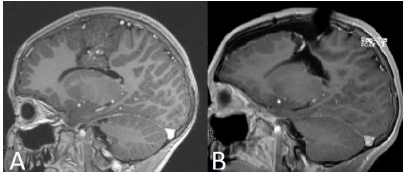
This 14-year-old girl presented with grand mal seizures heralded by visual auras, which were refractory to medications. A) T2 MRI Preop; B) T2 MRI Postop; C) 4x Magnification. Thin walled vessels with intervening gliotic brain with pigment-laden macrophages

Patient 3



A) Axial MRI Preop; B) Sagittal MRI Preop; C) Intraoperative photograph showing confluent telangiectasias

Patient 4



A) Sagittal MRI Preop; B) Sagittal MRI Postop