

# Teaching NeuroImages: Multiple giant intracranial aneurysms in Klippel-Trenaunay syndrome

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**Figure 1** Clinical features of Klippel-Trenaunay syndrome



Cutaneous capillary malformation on the right hand, hemihypertrophy of the left lower extremity, bony and soft tissue hypertrophy of right toe, and varicose vein on right leg confirmed the diagnosis of Klippel-Trenaunay syndrome.

A 40-year-old woman presented with horizontal diplopia and right proptosis for 1 month. She had esotropia and right abducens nerve palsy. Pupils were small and equal and there was no relative afferent pupillary defect. A cutaneous capillary malformation, hypertrophy of bone and soft tissue, and varicose veins on lower extremities were consistent with the diagnostic triad of Klippel-Trenaunay syndrome (KTS) (figure 1).<sup>1</sup> Orbital CT revealed multiple giant intracranial aneurysms (figure 2).

The mesodermal abnormality in KTS is due to somatic mutation, especially in hemangioblastic, lymphoblastic, and osteoblastic processes during embryogenesis.<sup>2</sup> Vascular malformations combined with KTS usually originate from slow flow systems, such as capillary, lymphatic, and venous systems.<sup>1</sup> However, arterial

aneurysms are reported in the literature, though only 8 cases of intracranial aneurysms have been reported so far.<sup>2</sup> Our patient had mild ophthalmic symptoms associated with potentially life-threatening multiple giant intracranial aneurysms, unlike previous cases.

The present case emphasizes the importance of prompt cerebrovascular imaging in patients with KTS with neurologic or ophthalmic symptoms.

## AUTHOR CONTRIBUTIONS

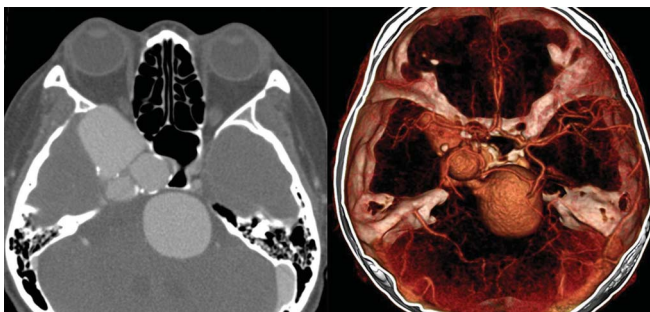
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**Figure 2** Orbital CT images



Orbital CT demonstrates multiple giant fusiform intracranial aneurysms, maximal diameter of 34 mm, from bilateral internal carotid artery, basilar artery, and right posterior cerebral artery.

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#### **DISCLOSURE**

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