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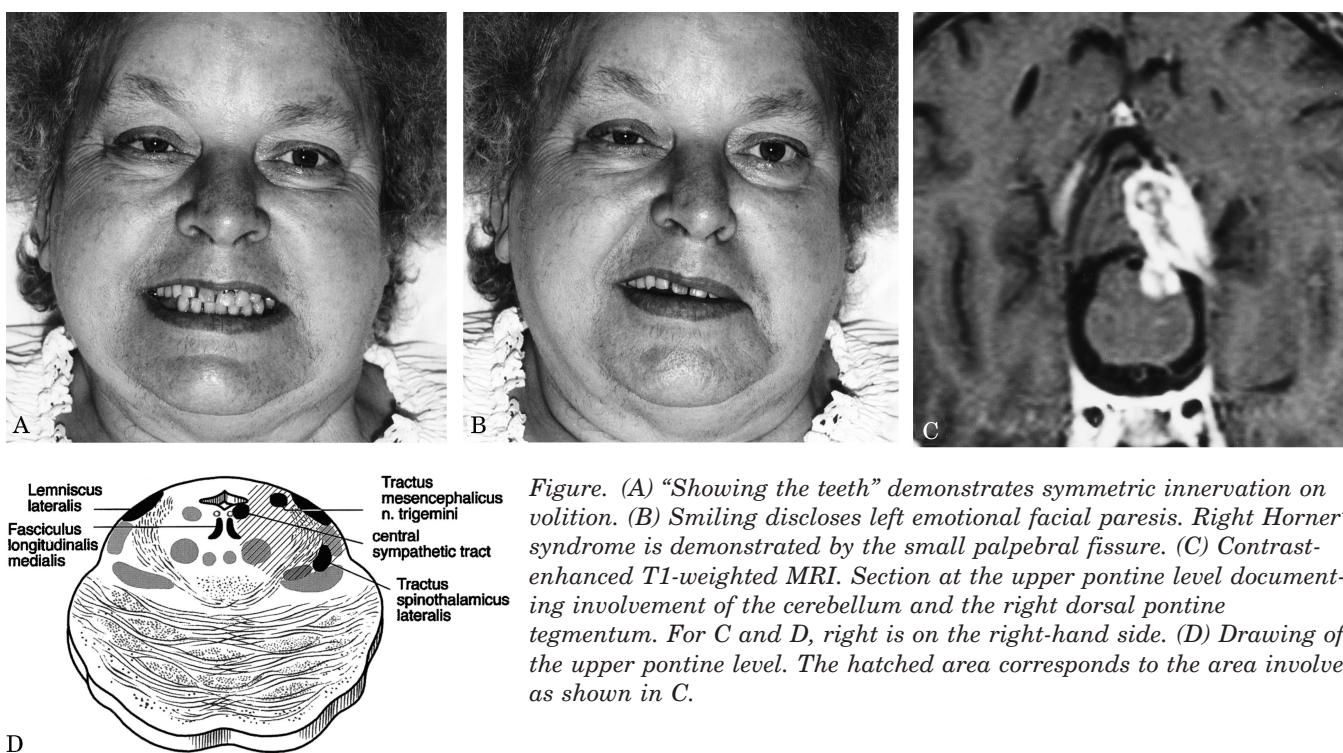


Figure. (A) "Showing the teeth" demonstrates symmetric innervation on volition. (B) Smiling discloses left emotional facial paresis. Right Horner's syndrome is demonstrated by the small palpebral fissure. (C) Contrast-enhanced T1-weighted MRI. Section at the upper pontine level documenting involvement of the cerebellum and the right dorsal pontine tegmentum. For C and D, right is on the right-hand side. (D) Drawing of the upper pontine level. The hatched area corresponds to the area involved as shown in C.

Emotional facial paresis of pontine origin

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A 63-year-old patient noticed sudden ataxic stance and gait dysarthria. Transitory symptoms were vertigo, nausea, and horizontal diplopia. Examination showed central Horner's syndrome, impaired sweating of the face, hemiataxia, and moderate positional tremor on the right and facial paresis with emotional innervation only (figure, A and B) and impaired pain and heat sensation over the entire hemiside on the left. Speech was dysarthric and hearing unimpaired. The masseter reflex amplitude was decreased by <60% on the right. MRI showed infarction within the superior cerebellar artery (SCA) territory including the dorsolateral pontine tegmentum on the right (figure, C).

The "classic" signs of SCA infarction are ipsilateral limb

and gait ataxia, static or intentional tremor, Horner's syndrome, and contralateral loss of pain and temperature sensation. Our patient represents the third well-documented description of contralateral emotional facial paresis (EFP) with SCA infarction. Two patients each had additional deafness (see reference 1) and Horner's syndrome and impaired sweating (our patient).¹ EFP results from pathology of the dorsolateral pontine area delineated by the sympathetic (Horner's) and spinothalamic tracts (sensory signs), the lateral lemniscus (deafness), and trigeminal mesencephalic tract/nucleus (masseter reflex) (figure, D). This area is quite distinct from the corticobulbar tract mediating voluntary facial innervation.²

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