



Harlequin syndrome

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Abstract

A 56-year-old man presented to the clinic with episodic headaches for several years which had been worsening over a few months prior to the presentation. He described headache as sharp, stabbing pain around the left eye associated with nausea, vomiting, photophobia, and phonophobia lasting for hours associated with flushing on the left side of the face. The picture of his face during these episodes showed flushing of the left side of the face, ptosis of the right eyelid, and miosis (panel A). Flushing in his face would resolve with the abortion of the headache. At the time of presentation to the clinic, his neurological exam was only significant for mild left eye ptosis and miosis (panels B and C). Extensive workup including MRI brain, cervical spine, thoracic spine, lumbar spine, CTA head and neck, and CT maxillofacial was unremarkable. He had tried several medications in the past including valproic acid, nortriptyline, and verapamil without significant benefit. He was started on erenumab for migraine prophylaxis and was given sumatriptan for abortive therapy following which his headaches improved. The patient was diagnosed with idiopathic left Horner's syndrome and his migraines with autonomic dysfunction would present with unilateral flushing opposite to the site of Horner's presenting as Harlequin syndrome [1, 2].

Keywords Harlequin syndrome · Horner's syndrome · Autonomic headaches

Case

A 56-year-old man presented to the clinic with episodic headaches for several years which had been worsening over a few months prior to the presentation. He described headache as sharp, stabbing pain around the left eye associated with nausea, vomiting, photophobia, and phonophobia lasting for hours associated with flushing on the left side of the face. The picture of his face during these episodes showed flushing of the left side of the face, ptosis of the right eyelid, and miosis (panel A). Flushing in his face would resolve with the abortion of the headache. At the time of presentation to the clinic, his neurological exam

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A Left facial flushing at the time of episodic headache (black arrows). **B** Partial ptosis and miosis in right eye (white arrow) (in ambient light). **C** Partial ptosis and miosis in right eye (white arrow) (miosis more obvious with ambient lights turned off)

Declarations

Ethical approval Informed consent for publication with pictures was obtained from the patient.

Conflict of interest The authors declare no competing interests.

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