TRAUMATIC HORNER SYNDROME

SÍNDROME DE HORNER TRAUMÁTICO

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ABSTRACT

Case report: We present a case of Horner's syndrome in a 33-year-old man who presented with ptosis and right pupil miosis after cervical trauma. Computed tomography revealed a tender haematoma in the neck, which was producing tracheal deformity and stenosis.

Discussion: Cervical trauma may damage the sympathetic pathway and result in Horner’s syndrome. This may be a manifestation of a life-threatening condition (Arch Soc Esp Oftalmol 2007; 82: 171-174).

Key words: Horner syndrome, meiosis, ptosis, cervical trauma, haematoma, neck, trachea.

RESUMEN

Caso clínico: Se describe un caso documentado de síndrome de Horner como manifestación de un traumatismo cervical. Un varón de 33 años se presentó con ptosis y miosis derecha después de una lesión cervical incisa. Las imágenes de tomografía axial computerizada del cuello demostraron un hematoma a tensión con deformidad y estenosis de la tráquea.

Discusión: Un traumatismo cervical puede interrumpir la vía simpática y cuando se realiza la exploración el síndrome de Horner puede ser la manifestación de un proceso potencialmente mortal.

Palabras clave: Síndrome de Horner, miosis, ptosis, traumatismo cervical, hematoma, cuello, tráquea.

INTRODUCTION

The Horner syndrome occurs due to an interruption of the sympathetic pathway in any part of its route, which goes from the central nervous system to the eye. Clinically, it develops with discrete ptosis of the upper eyelid due to involvement of Müller’s muscle, slight elevation of the lower eyelid (which is not always evident) due to paralysis of the smooth muscle which inserts in the inferior tarsus, variable miosis which becomes more evident with low lighting and apparent endophthalmos. In its complete form, facial anhydrosis occurs (1). This paper describes an unusual case of traumatic Hor-
ner syndrome in which the action of the ophthalmologist was crucial to suspect a severe systemic process.

**CASE REPORT**

A 33-year old patient who on August 20, 2005 was taken to the urgency ward due to a bleeding cut in the neck after falling over the window of a shop. The cut was long in the right anterolateral region of the neck with a clean dissection which involved only the superficial tissue without apparent damages to adjacent structures. Accordingly, the cut was sutured by planes (fig. 1). On Sept. 4, 2005 the patient returned to the urgency ward for a checkup and referred headaches and blurred vision in the right eye (RE). The ophthalmological assessment revealed an uncorrected visual acuity in the RE of 1 and the LE also of 1. The intraocular pressure was of 12 mm Hg in RE and 13 mm Hg in LE. Extrinsic ocular motility was normal with the exception of a 3 mm right palpebral ptosis with good functioning of the elevator. The RE pupil measured 2.0 mm and that of the LE 4.0 mm (fig. 2). External palpation and exploration of the neck was normal excepting of course the wound. A cervical CAT scan was made, revealing a large hematoma with internal growth which was significantly compressing the trachea (fig. 3). An intrasurgery exploration and evacuation was performed, exhibiting a cut in the external jugular vein which was filtrating to deep planes. Five months later the Horner syndrome had disappeared.

**DISCUSSION**

The Horner syndrome is the result of a lesion in any part of the sympathetic pathway which enervates the eye (1).

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**Fig. 1:** Aug. 20, 2005: Deep traumatism in the right anterolateral region of the neck, sutured by planes and with loose stitches. No involvement of vital structures was apparent.

**Fig. 2:** Sept. 4, 2005: Right side Horner syndrome, with ptosis and miosis. Anisochoria was more apparent in the dark. The right pupil was miotic but the reaction to light remained intact.

**Fig. 3:** Cervical CAT: cervical hematoma (arrow) secondary to a small dehiscence in the wall of the external jugular vein which significantly compressed and displaced the trachea (star) together with all the structures of the vascular and nervous package.
It is important to be fully familiar with the sympathetic ocular circuit and the structures which are in close contact with it, because the presence of an acquired Horner syndrome could be the first sign of a vital prognosis process. The Horner syndrome as a complication of cervical /facial traumatism in the head or neck is rare (2,3). Moreover, the case described above, which is secondary to a long and apparently superficial anterolateral wound in the neck which evolved in a few days as a Horner syndrome with potentially vital sequels, is even more unusual. Even so, the urgency ward ophthalmologist must bear in mind the possibility of this ophthalmological complication in neck wounds, including the above case in which the primary exploration of the lesion did not identify injuries at a deep level.

The full recovery of the patient five months after the initial accident would indicate that the original lesion was a focalized compression of the cervical sympathetic pathway and not a cut. This increases the importance of an early diagnostic because surgery should limit said sequels.

REFERENCES