Right abducens nerve palsy as the only manifestation of nasopharyngeal carcinoma: a case report

Kern Rei U¹, Shalini Rajamany¹, Siti Nur Aliah Rosly¹, Jasmine Abd Rashid²

¹Department of Ophthalmology, Hospital Selayang, Batu Caves, Selangor, Malaysia, ²Department of Ophthalmology, Queen Elizabeth Hospital, Kota Kinabalu, Malaysia

ABSTRACT

Nasopharyngeal carcinoma (NPC) can present with atypical symptoms including cranial nerve palsies as an early manifestation. We would like to report a case of NPC manifested as an isolated cranial nerve VI palsy. We report a case of a 32-year-old gentleman with no known illnesses presenting with a four-days-onset of binocular diplopia. He is a chronic smoker of 20 pack years and has a brother who passed away from advanced NPC. Examination revealed visual acuity of 6/6 in both eyes. Anterior segment and fundus examination were normal. Right eye extraocular muscle movement was limited on right dextroversion, full on all other gazes. There was binocular diplopia on primary and right gaze. Systemic examinations were unremarkable. Computed tomography (CT) showed a $2.7 \times 3.1 \times 2.4$ cm right nasopharyngeal mass with left submandibular lymphadenopathy. He was co-managed with the Otorhinolaryngology team and the biopsy was conclusive of NPC. He was referred to Oncology and commenced on combined chemoradiotherapy (CCRT) and weekly Cisplatin. Further CT and Magnetic resonance imaging revealed enhancing soft tissue extending from right carotid canal into right cavernous sinus towards medial cranial fossa and at right retroclival region and sphenoid sinus. After multiple cycles of CCRT, his latest CT shows resolution of right fossa of Rosenmuller mass with mild residual fullness, resolved intracranial extension through right Meckel's cave and reduction in size of cervical lymphadenopathy. Isolated sixth nerve palsy is an uncommon but possible presentation in NPC. Timely recognition of this disease can help orient patients to appropriate otorhinology and oncology attention required.