NEUROOPHTHALMOLOGICAL HEADACHES

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Neuroophthalmolgy is the overlap speciality between Ophthalmology and Neurology . Headache and facial pain accompany many neuroophthalmic disorders. The afferent visual system which roughly encompasses more than one third of the supratentorial brain mass and the efferent system which crisscrosses throughout the brain stem and cerebellum can be the origin of acute or recurrent headaches . Indeed , it is hard to imagine a neurologic disorder that could not have neuroophthalmic manifestations. Many diagnostic entities in the official groups 1 to 14 and in the appendix of ICHD 3 can present with neuroocular symptoms and signs. The commonest positive or negative migraine visual auras to Retinal migraine to complications of migraine like persistent auras , migrainous infarct and aura triggered seizures are the most important in the official ICHD 3 groups . Entities not in ICHD 3 too can surprise a clinician in a busy out patient clinic. Alice in the wonderland syndrome , migraine equivalents , Episodic pupil dilatation and Appendix headache disorders like Alternating hemiplegia of childhood , Visual snow , Aura status and visually triggered Vestibular migraines presenting with nysatgmus are some of them. Typical auras without headaches, probable auras , prodromal neuroocular symptoms like photophobia, blurring of vision and difficulty concentrating etc can be diagnostically challenging for any clinician so also differentials like seizure auras. Ocular and neuroocular autonomic symptoms of lacrimation, conjunctival congestion, miosis , ptosis, periorbital edema etc and rarely visual auras are classically diagnostic of Trigeminal autonomic cephalalgias. Primary stabbing headaches occasionally manifest in the orbito periorbital region. Ophthalmoplegic migraines (now renamed as Recurrent painful ophthalmoplegic neuropathy) and Brain stem auras are rare and difficult to diagnose . The most challenging are the GR 13 entities like HZO, Painful Optic Neuritis , THS and Ischemic oculomotor palsies which initially present only with orbital or periorbital pain without any diagnostic localizing signs or symptoms. Internal carotid artery dissection in Gr 6 is also similar . Primary Trochlear headache is a novel entity in ICHD 3 and is extremely rare . Subacute angle closure glaucoma and acute uveitis are to be ruled out in patients presenting with unilateral acute periorbital pain

Clinical evaluation and diagnosis of neuroophthamic headaches should include a meticulous history based on ICHD 3 , general physical exam , a detailed neurological and neuroophthalmolgical examination including cranial nerve assessment , fundoscopic exam looking for disc edema and spontaneous venous pulsations and palpation of the temporal arteries in the above 50 patients , blood pressure , intraocular pressure and temperature . In most cases, the cause of the headache is identified at this point whether primary or secondary and if secondary with any well documented RED FLAGS , investigations are planned accordingly. All patients with acute / subacute/different type/rapidly progressive or with neurological or neuroophthal symptoms or signs other than benign entities (Duanes retraction syndrome/ Superior oblique tendon sheath syndrome/End point and Congenital nystagmus/ Pseudopapilledema etc) require an urgent evaluation. In most cases of long standing

episodic head pain suggestive of a primary headache disorder with a normal examination , no further investigation is necessary.