

Cluster Headache in a Woman

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Abstract: Cluster Headache (CH) is a rare primary headache disorder affecting 0.05-0.1% of the population^[1]. It is more common in men than women, Male female ratio 6-7:1^[6]. CH is characterised by recurrent attacks of severe, unilateral, retro or periorbital pain and/or temporal pain lasting for 15-180 minutes accompanied by ipsilateral autonomic symptoms in the eyes, nose and the face. Attacks being clustered (hence the name) in bouts that can occur during specific months of the year. During bouts, attacks may happen at specific hours especially at night. CH may be episodic or chronic based on presence of remission periods. Here we report a case of cluster headache in a woman aged 46, diagnosed as per the diagnostic criteria adapted from International classification of Headache diseases (ICHD-2&3)^[1,2].

Keywords: Autonomic symptoms; Cluster headache; Primary headache; Sex ratio

1. Introduction

Cluster headache (CH) was first described by Wilfred Harris (1869-1960) a Madras born London Neurologist^[2]. It is a rare form of primary headache and one of the most painful disorder in humans^[4]. Pain is so severe and excruciating hence called as "suicidal headache"^[3]. The patho-physiology of Cluster headache is quite complex and not clearly understood^[3]. It is a neurovascular headache, probably due to the activation of trigeminovascular complex and trigeminal autonomic reflex hence called as Trigeminal autonomic cephalgia^[1,2]. Hypothalamus also plays a causative role as evidenced by functional neuro imaging studies (PET Scan) taken during attacks^[1,2].

Diagnosis is made only on clinical grounds^[1]. It is often underdiagnosed or misdiagnosed^[1,2] and being diagnosed very late^[1,2]. At present there is no curative treatment^[1]. To relieve pain during acute attacks, inhalation of oxygen and parenteral and nasal spray sumatriptan are effective measures^[4,7]. As a prophylaxis to reduce the frequency of attack, verapamil or prednisolone can be used^[4,7]. In refractory cases, deep brain stimulation of the posterior hypothalamic grey matter is successful^[4]. Prognosis is unpredictable

2. Case Report

46 year old female presented with headache on left side, 8-10 times per day for 3-4 days in a week for 2 years. Each time the pain was severe or excruciating lasting for about 30 mins and felt in and around left eye associated with redness and watering of eye and also sweating in the left side of face. History of suicidal tendencies present during attacks. There was also h/o sense of restlessness, agitation and tendency to move about during each attack. No history of nausea, vomiting, photophobia or phonophobia prior to each attack. Patient had similar pattern of headache at her age of 10 which was lasting for one year and subsequently

asymptomatic for all these years and now presented second time at her age 44. No h/o fever, seizures or visual disturbances. No past h/o head injury. Not a known Hypertensive or diabetic or CAD. Not an alcoholic/smoker. No family History of similar headache. On examination during the attack, there was lacrimation and congestion in the left eye and sweating on the left side of face were noted. On general examination pt average built and moderately nourished, no pallor, no pedal edema, no clubbing/ cyanosis/ icterus. Vitals – normal. CNS examination revealed Higher mental functions - Normal. No signs of meningeal irritation. No neurological deficit. Fundus – N. All other systems were clinically Normal. Routine blood investigations like Blood sugar and Renal parameters – N, ECG – N, CXR – N, CT BRAIN – N. ENT opinion – N.

Diagnosis was made as cluster headache and confirmed by the fulfillment of diagnostic criteria of CH (International classification of Headache diseases ICHD 2 & 3)^[1,2]

3. Discussion

Headache is a common presenting symptom in day to day clinical practice. It can be primary or secondary to some underlying illness like CNS or systemic infections, SAH, brain tumour etc. Among the primary headache the incidence is highest in tension headache (69%), next to that comes Migraine (16%) and the least is cluster headache (0.1%)^[7].

In Tension headache, the pain is bilateral and related to stress, whereas in Migraine Cluster headache (CH) and Trigeminal neuralgia (TN) pain is unilateral and recurrent. Family history is often present in Migraine and in CH only in 10%^[1]. Regarding the age and sex incidence, Migraine common in women and onset in childhood to early adulthood, CH common in young adult males (20-40 years) and TN common in middle or old age. Prodromal symptoms like photophobia/phonophobia/nausea/vomiting are

common in Migraine, rare in CH and absent in TN. Regarding the site nature and duration of pain, in Migraine unilateral throbbing pain lasting more than 4 hours, in CH unilateral retro or periorbital excruciating pain lasting for a short period 15-180 minutes (less than 4 hours) and associated with ipsilateral autonomic symptoms and in TN burning or electric shock like paroxysmal pain in lips gums cheek or chin lasting seconds to minutes^[3]. Regarding the behaviour of the patients during the attack, in CH, patient will be restless agitated and tends to move about, whereas in migraine patient will be quite and avoid any movement. This behavioural abnormality is very important to differentiate CH from Migraine and hence it is included as a separate entity^[1] in the diagnostic criteria of CH (ICHD-2&3). This behavioural abnormality of CH is present in our case. Regarding the trigger factors, Alcohol alone for CH^[1,2], for Migraine apart from alcohol there are various other factors like bright light, sound, stress etc and for TN there is no trigger factor but only trigger zones. Our patient presented with all the classical features of CH so far discussed and fulfilled the diagnostic criteria of CH (ICHD -2&3). Circadian cyclicality is not observed in all CH patients and not included in ICHD diagnostic criteria^[1] and it is not present in our patient also.

Recent studies done on CH in women comparing with CH in men concluded, in women the onset is early and there are two peaks of onset (second and fifth decade) and in men onset is only in third decade and Ptosis and miosis less common in women^[5,6]. This conclusion coincides very well with our patient as she had an early onset and also two peaks of onset, first at the age of 10 and now the second at the age of 44 and ptosis and miosis are absent.

4. Conclusion

This case is reported due to rare incidence of CH and to create an awareness about the recent trends of raising incidence in women and also to emphasize on early diagnosis.

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