A Case of Migraine Mimicking as Paranoid Schizophrenia- A Case Report

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Abstract
Migraine is the most common neurological disorder affecting people of all ages worldwide. Classical presentation is an episodic headache with or without aura. Aura is commonly visual disturbance, but auditory hallucinations are very rare. However, auditory hallucinations are among diagnostic criteria for paranoid schizophrenia, a psychiatric disorder. Presented case is a rare example of migraine mimicking as paranoid schizophrenia. This case emphasises the occurrence of auditory hallucinations during a migraine attack, the role of surrounding circumstances and cultural beliefs in the shaping of thinking of an individual, along with the importance of thorough evaluation before diagnosing someone with a mental disorder. Management followed as for a case of a usual migraine headache with good recovery.

Keywords: migraine, aura, auditory hallucinations, paranoid schizophrenia, triggers

INTRODUCTION
Migraine is a frequent neurological condition faced by people of all age groups, social classes, and races. Migraine is twice more common in females than males and usually present between the ages of 20 - 50 years. A typical presentation includes episodic headaches with or without associated symptoms such as visual disturbances, nausea and vomiting, photophobia, phonophobia, osmophobia, and numbness/weakness in limbs [1]. Rarely patients can experience tingling or buzzing sound in the ear, but well-formed auditory hallucinations are extremely rare [2,3]. Episodes of a migrainous headache can be triggered by emotional and physical stress, certain foods, hormonal changes or environmental factors [1]. On the other hand, Paranoid Schizophrenia is a psychiatric diagnosis characterised by paranoid delusions usually accompanied by hallucinations (mostly auditory) for at least one month, in the absence of any organic brain disease or alcohol/drug-related disorder [4]. We describe here a single case of migraine having a presentation similar to paranoid schizophrenia.

CASE REPORT
Miss A, a 19-year-old female, was preparing for medical entrance examination away from her home when brought for psychiatric assessment by her elder brother, a final year medical student, for hearing voices, suspiciousness, feeling scared and worried, and deteriorating performance in her
studies over the last month. In history, she reported that for last few weeks, during her late night study, she occasionally experienced some muffled sounds and sometimes a girl calling her name. This was followed by pain in her eyes, blurring of vision, and a throbbing headache at both temples associated with nausea, lasting for the whole night making difficult to sleep. Her mental status revealed a fearful mood with paranoid ideations against her batchmate whom she considered doing some witchcraft to stop her from studying and gain a good score in weekly tests. She had insight into her hallucinations, but she was quite worried about her falling preparation. Her cognitive functions and reality testing were intact. On further probing, she accepted that at home, she had occasional episodes of headache lasting for few hours for which she rarely had to take painkillers. There was not any past history of severe medical illness, similar experience or any other psychiatric problem. Her family history also excluded any mental illness.

**MANAGEMENT**

Routine investigations including a thyroid profile came out normal. An EEG and MRI Brain was done to rule out epilepsy and intracranial lesions. She was started Naproxen Sodium and Propanolol with some advice on diet, adequate rest, sleep hygiene, managing examination stress and avoiding bright lights and loud noises. She began improving and after two weeks of treatment, her episode of headaches and hallucinations had been remitted with the regaining of all functioning including her studies.

**DISCUSSION**

Auditory disturbances are unusual in the aura preceding a migraine attack, and auditory hallucinations are very rare but have been reported [2-3]. The patient had clinical symptoms of migraine with an aura of auditory hallucinations. Her migraine was precipitated by late night study, the stress of entrance examination and studying late night under the direct bright light of a table lamp. Factors like insecure environment while staying away from home, cultural beliefs of supernatural phenomenon and competition among students might have played a critical role in shaping the paranoid ideations. A successful management of migraine includes both termination of the acute episode, with prophylaxis against further attacks, and identifying and avoiding triggers.

**OUTCOME**

As the patient was sister to a medical student, it was easy to follow up her. Her headaches became very less frequent and in a follow-up of three years, she didn't develop any psychiatric illness.

**CONCLUSION**

This case is a rare example of migraine with auditory hallucinations and shows the myriad presentation of clinical symptoms during an attack. It also sheds light that how our surrounding circumstances and cultural beliefs shape our thinking. Again, it is critical to evaluate a patient thoroughly for any significant medical illness which can present as psychiatric symptoms before labelling with any mental illness.

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