

An Interesting Case of Occipital Neuralgia

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Abstract: Occipital pain is a common complaint in patients with headache. The differential can include many primary headache disorders such as cervicogenic headache or migraine. Occipital neuralgia is an uncommon cause of occipital pain characterized by paroxysmal lancinating pain in the distribution of the greater, lesser or third occipital nerve. Incidence and prevalence rates are too low for this type of headache. Slight female predominance is present. Occipital neuralgia symptoms include aching, burning, and throbbing pain that is often unilateral and continuous with intermittent, shocking, shooting pain. The pain usually originates in the sub-occipital area and radiates to the posterior and/or lateral scalp. Few patients report retro-orbital pain on the affected side. Pain may also be perceived over the neck, temple, and frontal regions. Pressure over the occipital nerves may amplify the pain, but there is usually no clear trigger. Furthermore, some patients may have a positive Tinel's sign over the occipital nerve. Occasionally, neck movements (e.g., extension and rotation) may trigger pain. At times, patients with occipital neuralgia may experience symptoms similar to migraine or even autonomic changes characteristic of cluster headaches. Associated symptoms include posterior scalp paresthesias, photophobia, and dizziness. Many patients with occipital neuralgia report a cycle of pain-spasm-pain. Here we are reporting a young adult male who was diagnosed with occipital neuralgia due to its rarity.

Keywords: Occipital Neuralgia, Headache

1. Introduction

Occipital neuralgia is an uncommon cause of headache characterized by paroxysmal lancinating pain in the distribution of the greater, lesser or third occipital nerves. Incidence and prevalence rates are too low for this type of headache. Slight female predominance is present. Occipital neuralgia symptoms include aching, burning, or throbbing pain that is often unilateral and continuous with intermittent, shocking, shooting pain. The pain usually originates in the sub-occipital area and radiates to the posterior and/or lateral scalp. Few patients report retro-orbital pain on the affected side. Pain may also be perceived over the neck, temple, and frontal regions. Pressure over the occipital nerves may amplify the pain, but there is usually no clear trigger. Furthermore, some patients may have a positive Tinel's sign over the occipital nerve. Occasionally, neck movements (e.g., extension and rotation) may trigger pain. At times, patients with occipital neuralgia may experience symptoms similar to migraine or even autonomic changes characteristic of cluster headaches. Associated symptoms include posterior scalp paresthesias, photophobia, and dizziness. Many patients with occipital neuralgia report a cycle of pain-spasm-pain. Though pain might be controlled with routine painkillers, few patients might require specific therapy in the form of nerve or ganglionic blockade. And for such patient, accurate diagnosis is required. Here we are reporting a young adult male who was diagnosed with occipital neuralgia, due to its rarity.

2. Case History

A 32-year-old male patient presented with chief complaints of headache since last three months. The episodes of headache would start in the occipital region which would also involve the retro-orbital area. The pain was throbbing in nature, with moderate severity. Episodes had sudden onset, each would last about two to three hours, with frequency once a week. There was no history of any nausea, vomiting,

photophobia, phonophobia, visual or auditory disturbances. There was no history of trauma. There was no history of watering or redness of eye, or nasal congestion during the episodes. There were no any triggering or relieving factors. There was no similar history in any family member. Physical examination was within normal limits. All routine investigations were within normal limits. X-ray of cervical spine was normal. Neuroimaging in the form of MRI brain with cervical spine was also normal. Patient was admitted for evaluation of headache. Occipital nerve blockade was given and it relieved the pain. Patient was diagnosed with occipital neuralgia (idiopathic). Patient was started on NSAID for relieving of pain as and when needed. He was also advised to start carbamazepine as preventive treatment by neurologist. Patient is symptomatically better and is now in remission.

3. Discussion

Headache is one of the most frequent complaints among the patients visiting hospital especially for general medicine, psychiatric and neurology OPDs. Nearly 90% of the population will experience headache at some point of their life. Occipital neuralgia is a rare headache type which may mimic other primary headache like migraine, tension type headache or cluster headache. Patients with occipital neuralgia may be divided into those with structural causes and those with idiopathic causes. Structural causes include: trauma to the greater and/or lesser occipital nerves, compression of the greater and/or lesser occipital nerves or C2 and/or C3 nerve roots by degenerative cervical spine changes or cervical disc disease tumours affecting the C2 and C3 nerve roots. Management of occipital neuralgia follows, starting with the recommended conservative treatment, conventional therapy, and medications such as non-steroidal anti-inflammatory drugs (NSAIDs), neuropathic medications (seizure medications, tricyclic antidepressants), and possibly opioids. If the cause is structural, surgical treatment may be indicated. Because

the majority of patients have no clear structural cause, their treatment is usually symptomatic. Local nerve blocks, medications, occipital nerve stimulator implantation, surgical decompression, or lesioning of the C2 and/or C3 nerve roots, or even the greater and/or lesser occipital nerves, may be considered.

4. Conclusion

Occipital neuralgia is a headache syndrome that requires careful attention to enable proper diagnosis and treatment. Occipital neuralgia is often difficult to manage because it can easily be mistaken for other headache syndromes. Clinicians should take this into considerations while treating the patients of headache.

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