Occipital nerve block in the treatment of headache

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Occipital nerve block with steroid and local anesthetic can be used as the primary treatment of headaches but are more often used to treat intractable headaches when other methods have failed. It is most effective on the occipital neuralgia, moreover some evidence also supports it may help with cluster headache, cervicogenic headache, migraines and medication overuse headaches.

Three occipital nerves arise from C2 and C3 spinal nerves and innervate the posterior scalp region.

Greater occipital nerve (GON) and lesser occipital nerve (LON) block is useful method in the diagnosis and treatment of occipital neuralgia. This modality has some attractive features such as easy technique, minimum invasiveness, safety, no drug-to-drug interactions, and negligible cost; then it can be tried for treatment in various headache disorders. meanwhile its effectiveness and duration of relief can vary significantly from person to person. This procedure can perform by three techniques: landmark, fluoroscopic and ultrasound guided.

Third occipital nerve (TON) block is useful in the diagnosis and treatment of third occipital nerve headache. It can also to be used in a prognostic manner to assess the potential efficacy of RF lesioning. This technique can be done by two means fluoroscopy and ultrasound guided.

Radiofrequency lesioning of occipital nerve block is useful in selected patients who have experienced short term relief with occipital nerve blocks with LA or steroid and have failed to respond to other conservative therapies.

Any patient with headache severe enough to require neural blockade as part of treatment plan should undergo brain MRI and cervical spine X-Ray to rule out unsuspected intracranial diseases.

Key words: Occipital headache, Occipital nerve block, Radiofrequency lesioning