

## **Supra Orbital Neuralgia A Rare Manifestation of Neuritic Hansen's Disease**

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### **ABSTRACT**

One of the most common diseases in tropical countries is Hansen's disease. Mainly presents as Tuberculoid and lepromatous leprosy apart from its sub classification. Neuritic Hansen's disease is one of the commonly seen cases by the neurologists. It can present as mononeuritic form or mononeuritis multiplex with or without dermatologic manifestations. Among the peripheral nerves involved most common are greater auricular, ulnar, superficial radial, Median, common peroneal and posterior tibial. It's very rare to involve supra orbital nerve. Here we present a case of Supra orbital neuralgia with thickened nerve associated with erythematous hypoaesthetic patch with raised margins. Tapping over the supra orbital nerve produces severe shock like pain. This patient was not willing for Biopsy and hence basing on clinical diagnosis MDT was started and the patient showed remarkable improvement in 1 month.

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### **INTRODUCTION**

Leprosy is one of the common diseases in tropical countries. It is rarely seen in developed countries. Mainly classified in to Tuberculoid and lepromatous leprosy apart from the sub classification. Because of the leprosy control programme being implemented the prevalence of the disease and the severe manifestations have come down. In the present days we come across cases of Neuritic Hansen. This may present as Mononeuritic form or mononeuritis multiplex with or without dermatological manifestations. The common nerves involved are Facial, Trigeminal, greater auricular and other cranial nerves. Coming to the peripheral nerves Ulnar, superficial radial, Median, common peroneal, and posterior tibial nerves are commonly involved. The involvement presents as Thickened nerves, weaknesses and wasting of muscles in the distribution of the nerves and hypoaesthesia patches. Rarely they present as neuralgia. Supra orbital nerve involvement is very rare when compared to the involvement of other nerves. Neuritic Hansen presenting as supra orbital neuralgia is less commonly reported. Hence we report here a case of Neuritic Hansen presenting as supra orbital neuralgia.

### **CASE VIGNETTE**

A 35 years old male patient presented with severe pain in the Right supra orbital region radiating posteriorly towards vortex, burning type episodic and quite frequent. Precipitated with touch, cold breeze or face wash with water. This problem is there since 3 months. He is not a known Hypertensive or diabetic.

### **ON EXAMINATION**

well-built individual with THICKENED SUPRA ORBITAL NERVE on Right side and tapping on the nerve produces severe pain radiating up to vortex. There is an Erythematous patch extending from Right frontal region towards Right ear involving the Pinna of the ear. The margins are elevated and the patch is hypoaesthetic. There is an added existence of Thickened greater auricular nerve on Right side. Examination of other cranial and peripheral nerves was normal. There were no hypopigmented and hypoaesthetic patches in other areas. Other neurological examination and examination of other systems were normal.

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### INVESTIGATIONS

Haematological parameters like Blood sugar, Renal, Hepatic, viral markers were all normal. Patient refused Nerve and ear lobe Biopsy.

**Existence** of nerve thickening, Erythematous hypaesthetic patch with raised margins and clinical experience made us to think of NEURITIC HANSEN presenting as supra orbital neuralgia and started on MDT.

The drugs given were:-Cap Rifampicin 600mg once in a month , Tab Dapsone 100mg daily , Tab clofazimine 100mg Stat followed by 50 mg daily along with Iron and folic acid (5).

We found a remarkable improvement in 1 month. His supra orbital neuralgia became normal. The size of thickened supra orbital nerve came down almost to normal size and erythema of the patch and size of the patch came down. This indicates that Neuritic Hansen can present as supra orbital neuralgia and responds well to MDT .The treatment has to be continued for 1 year ,otherwise recurrence can happen.

### DISCUSSION

Neuritic Hansen is not an uncommon disease in tropical countries. The diagnosis depends on the experience of the physician and the other criteria like Thickened nerves and Erythematous or hypopigmented, hypaesthetic patches. The manifestation of neuralgia involving supraorbital nerve may be because of stretching of the nerve or the nerve might have

been strucked . Though the nerve Biopsy is gold standard there is drawback by way of neurologic deficit and the yield of bacteria is less .Similarly the ear lobe and Nasal mucosal biopsies also yield less which comes to about 32 to 51 percent (1) So we consider the experience of the physician (3) and the other two criteria described such as Thickened nerves and Erythematous or hypopigmented patches are sufficient for the diagnosis and management of Neuritic Hansen's disease. But we should remember to rule out the other neurological conditions that cause nerve thickening like, Acromegaly, Amyloidosis, Neurofibromatosis, Relapsing and remitting GBS, Autosomal dominant Hypertrophic neuropathies etc (2). The Nerves commonly involved in leprosy like facial, Trigeminal, greater auricular and some of the lower cranial nerves (4) . Cranial nerve involvement occurs in 10 to 17 % and common peripheral nerves like ulnar, superficial radial, Median, common peroneal, posterior tibial must routinely be examined which will help in further reinforcement in the diagnosis and management.

### TAKE HOME MESSAGE

Neuritic Hansen is one of the common tropical treatable neurological condition the early treatment of which can prevent the disability and gives remarkable improvement. Supraorbital neuralgia is one of the rare manifestation of Neuritic Hansen's disease and if diagnosed and treated with MDT patient responds remarkably well.

### PRE-TREATMENT



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### POST TREATMENT AFTER 1 MONTH



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