



POST HERPETIC NEURALGIA AND TRIGEMINAL TROPHIC SYNDROME INVOLVING THE SCALP

Dermatology

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ABSTRACT

Trigeminal trophic syndrome (TTS) is characterized by pain which is chronic and debilitating, burning sensation and itching in the distribution of trigeminal nerve. Here in this case report, we present a 44-year-old female with ulcer, severe pain, itching and stinging sensation on her right forehead and scalp following an episode of herpes zoster involving V1 segment of trigeminal nerve. This case is reported as being rare as there is involvement of scalp rather than the classical presentation in the alae of nose.

KEYWORDS

Trigeminal trophic syndrome, Herpes zoster

INTRODUCTION:

Trigeminal trophic syndrome is a rare disorder with pain, paresthesia in the distribution of trigeminal nerve and ulceration of the alae of the nose. (1) This disorder was first described by Wallenberg in 1901 and later by Loveman in 1933 as cutaneous ulceration in the trigeminal nerve distribution. (2) The causes for this entity are central sensory nervous system injury, leprosy neuritis and secondary to herpes zoster involving trigeminal nerve distribution or secondary to the treatment for trigeminal neuralgia. (2)

TTS presents as paresthesia, severe pain and itching in the distribution of trigeminal nerve. Ulcers, usually unilateral, begin as small crusted lesions progressing to crescent shaped ulcers. These ulcers are commonly seen in the alae of the nose rarely involving the scalp, ear and cheeks. This rare case is being reported as the symptoms and the ulcers were involving the frontal scalp secondary to herpes zoster involving ophthalmic branch of trigeminal nerve.

CASE REPORT:

A 44-year-old female patient presented to the dermatology OPD with chief complaints of severe pain, burning sensation and intractable itching in her right forehead for 6 months.

6 months before she gives history of developing pain in her right forehead and scalp initially and after a span of 3 days noticed fluid filled lesion on the right forehead and few in her right side of her scalp. The patient had consulted a general physician for the same complaint and was prescribed tablets and injections, the records of the treatment were not available. The lesions resolved after 1 week but her pain, burning sensation and itching did not subside and she had aggravation of her symptoms for which she consulted the OPD. The patient gives history of constant picking and scratching the affected area.

On examination the patient had post-inflammatory hyperpigmentation, scarring over right forehead (Figure 1). She had alopecia and ulcer of size 21 cm over the right parietal region of the scalp (Figure 2) with surrounding erythema. Her corneal reflexes were normal. A diagnosis of trigeminal trophic syndrome secondary to herpes zoster was made. The patient was initially given analgesics and a course of antibiotics as the ulcer was infected. Later she was prescribed pregabalin 75mg BD and the patient was advised not to self-manipulate the area.

DISCUSSION:

The causes for facial ulcers are many; the rare and important cause is TTS. The symptoms of this disorder have been mentioned above. The cause has been attributed to the destruction of the trigeminal nerve either due to central or peripheral cause. Males are commonly affected in a ratio of 2:1. The etiology for this disorder can be iatrogenic

following surgical procedures involving the trigeminal nerve and its ganglia, syphilis, leishmaniasis, basal cell carcinoma and acoustic neuroma.

The presentation is usually with a triad of paresthesia, anesthesia and facial ulceration. There may be pain or burning sensation and severe itching associated with the disorder. Patients usually resort to self-manipulating behaviors like constant picking and scratching in the affected region leading to the development of initial erosions finally culminating into crescentic ulcers commonly located in the alae of the nose and sparing the nasal tip. (3) Unusual location of the ulcers is seen in the cheek, scalp, lips, ears and jaw. Sometimes the ulcers are bizarre in presentation so that this condition is commonly misdiagnosed as dermatitis artefacta. The time taken for the ulcers to develop following trigeminal nerve damage may vary but may take an average of 2 year. (4)

Careful history taking and clinical examination usually leads to the diagnosis. Histopathological examination is usually non-specific showing ulceration with inflammatory infiltrate. (5) Neurological examination of the affected area usually shows decreased sensation of touch or sometimes the patient may have allodynia. Treatment of this disorder is usually multidisciplinary involving dermatologist, neurologist and psychiatrist. The main aim of treatment is to decrease the unpleasant sensation which stimulates the patient to manipulate the area unnecessarily. Emollients and dressings help in healing of the ulcers. Regular dressing of the affected area is beneficial as the picking of the area is hampered by the dressing.

Patient education regarding avoidance of self-manipulation is of prime importance in this disorder. Drugs like gabapentin, pregabalin, amitriptyline, carbamazepine and SSRIS can minimize the patients suffering. Cognitive behavior therapy can also help in reducing the patients' agony. Finally, some surgical procedures like cervical sympathectomy can provide benefit provided the patient does not traumatize the affected area.

CONCLUSION:

TTS syndrome though being very rare can be included in the differential diagnosis in cases of facial ulceration. Patients of herpes zoster during follow-up should be examined carefully for the development of trophic changes including the scalp. The mainstay of treatment of this disorder is proper counselling of the patient.

ACKNOWLEDGEMENT: None

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest

LEGENDS TO FIGURE:

FIGURE 1: Post- inflammatory hyperpigmentation with ulcer over the scalp following herpes zoster



**FIGURE 2:
Alopecia involving the right parietal region of scalp with well-defined ulcer with erythema**

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