

TRAUMA TREATING TRAUMATIC FACIAL NERVE PARALYSIS: TRUTH OR COINCIDENCE?

Sir,

Time and patience have been the conventional healers of delayed-onset traumatic facial nerve paralysis. Facial nerve stimulation has played a supportive role in speeding up the recovery. It is managed depending on time of onset and completeness of the paralysis. Delayed-onset paralysis is usually managed conservatively as the rate of spontaneous recovery in such cases is very high.

We present a case of a 46-year-old man who developed progressive facial paralysis 5 days following head injury and temporary loss of consciousness. The patient developed all the classical features of lower motor neuron facial paralysis, along with loss of lacrimation and taste perception. He primarily presented complaining of hearing loss in the right ear. On examination, his tympanic membrane was normal, and there was no associated bleeding from the ear or hemotympanum. Tuning fork tests suggested mixed hearing loss. The pure-tone audiogram of the patient showed mixed

hearing loss, and an impedance audiogram showed absent stapedial reflex. CT scan showed no fracture of the temporal bone and intact ossicles. The patient was prescribed high-dose steroids, along with vigorous facial nerve stimulation and massages.

After 3 weeks of treatment, the facial nerve stimulation tests were repeated and the readings were compared to those taken prior to treatment. There was negligible improvement. The patient was offered an exploratory mastoidectomy to try to locate the lesion of the facial nerve and decompress or repair the damaged part, which he turned down. He chose to be discharged against medical advice and discontinued all medications.

Three months after the initial trauma, the patient claimed to have suffered another episode of trauma similar to the first episode but less severe and with no loss of consciousness. The patient did not seek any medical advice. He however reported that his facial disfigurement started improving and recovery was complete in 6 to 7 days. There was, however, no reported improvement in lacrimation or taste.

A repeat audiogram showed an increased sensorineural component. Impedance audiometry showed an absent stapedial reflex. We concluded that the motor component of the facial nerve had recovered but the other functions remained depressed.

Facial nerve paralysis can be a disfiguring disorder with profound impact on the patient.^[1] Patients suffering from this debilitating condition are unable to express various emotional states.^[2] It occurs in 5% of the cases of head injuries,^[3] and 25% of facial injuries recover spontaneously.^[4]

Strands of facial nerve interconnect with cranial nerves V, VIII, IX, X, XI, and XII and with the cervical cutaneous nerves. This free intermingling of fibers of the facial nerve with fibers of other neural structures (particularly the cranial nerve V) has been proposed as the mechanism of spontaneous return of facial nerve function after peripheral injury to the nerve.^[4]

Early onset/complete palsy indicates disruption of continuity of the nerve. A delayed onset/partial paresis suggests secondary swelling or compression of nerve that is more likely to recover spontaneously. Most patients of peripheral traumatic facial nerve injury recover with time; and occasionally, treatment. The case we present is unique in the sense that a second similar episode of trauma resulted in recovery of facial nerve motor function which is inexplicable. It is possible that the repeat trauma to the facial nerve stimulated the nerve and speeded the recovery process or that the facial nerve recovered spontaneously and the second episode of trauma was coincident.

In the literature, we have not come across any mention of repeat trauma leading to recovery of traumatic facial nerve palsy. This case highlights the fact that the hope of recovery in traumatic facial paralysis (delayed onset) should not be lost, and the patient should be advised electro-physiotherapy for up to 6 months after the initial episode.

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REFERENCES

- 1 Napoli AM, Panagos P. Delayed presentation of traumatic facial nerve (CN VII) paralysis J Emerg Med 2005;29:421-4.
- 2 Popovic D, Stankovic M, Popovic Z, Milisavljevic D. Traumatic facial Palsy. Med Biol 2003;10:145-7.
- 3 Odebode TO, Ologe FE. Facial nerve palsy after head injury: Case incidence, causes, clinical profile and outcome. J Trauma 2006;61:388-91.
- 4 Schaitkin B, May M. Disorders of the facial nerve. Scott-Brown's Otolaryngology. 6th ed. Vol. 3, Butterworth Heinemann; 1997. p. 24/11-12.

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