

## Acupuncture Treatment in Bell's Palsy Disease in Bangladesh - A Case Report

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Stroke and Bell's palsy are the most prevalent causes of sudden facial paralysis. Central or peripheral facial weakness will be determined by the patient's medical history and neurologic examination. MRI of the brain is essential to check for ischemia, infection, and inflammation if the patient has central weakness. A blood count, a cerebrospinal fluid examination (CSF), a sedimentation rate and glucose level, and serologic testing to diagnose syphilis, the human immunodeficiency virus (HIV), and vacuities, may be required. Suo-Xi Acupuncture Hospital at Shantinagar, Dhaka, Bangladesh was the site of this investigation. An asymptomatic 41-year-old male patient has been complaining of a right-to-left mouth deviation when speaking. Peripheral Facial Weakness and Central and Peripheral Facial Weakness Charts were used to corroborate the diagnosis of facial nerve dysfunction. In subsequent studies, encouraging results were found. The patient no longer felt the pain of his lips veering to the right as he spoke, a problem he had experienced for years. According to the results of this research, people with Bell's palsy may benefit from acupuncture.

**Keywords:** Bell's Palsy; Diagnosis; Acupuncture at Face; Physiotherapy; Mobilization; Functional Anatomy; Facial Nerve; Peripheral Facial Weakness; Mouth Deviation**Introduction**

Bell's palsy is an example of a condition in which there is no obvious explanation and no quick testing is required. Between 20 and 30 persons per 100,000 suffer with Bell's palsy in any given year [1]. It's the cause of 60-75% of all occurrences of one-sided paralysis of the face [2]. Equally, both sexes are impacted. At 40, the disease's median start time is, however it may develop at any time [3]. Children under the age of 10 have the lowest incidence, which rises between the ages of 10 and 29, stabilizes between the ages of 30 and 69, and is greatest in those over 70. With equal frequency, the left and right sides of the face are implicated. The majorities

of patients make a full recovery, while a few have long-term, disfiguring facial paralysis [4]. A poor prognosis may be predicted by variables including advanced age, high blood pressure, loss of taste, discomfort elsewhere in the body, and full facial paralysis [5-7]. Facial muscle electrical investigations show little to no change in electrical activity on days 1 to 3, however on days 4 to 10 the rate of reduction steadily decreases. There is a 90% recovery rate for people with excitability; only a 20% recovery rate for those with no excitability [8,9].

Acquired weakness in the peripheral face muscles may be caused by a variety of less common factors. Diabetes, high blood

pressure, HIV infection, Lyme disease, the Ramsay Hunt syndrome (a facial palsy with zoster oticus caused by the varicella-zoster virus), sarcoidosis, Sjögren's syndrome, parotid-nerve tumors, eclampsia, and amyloidosis are all associated illnesses that need to be addressed. Patients who received an inactivated intranasal influenza vaccination have also been diagnosed with peripheral-facial-nerve palsy [10].

Bell's palsy is seldom recurrence. Myasthenia gravis or lesions at the base of the brain where the facial nerve leaves the pons should be considered in cases of recurrent or bilateral facial paralysis. Such paralysis may be seen in patients with lymphoma, sarcoidosis, or Lyme disease [11]. Patients with inflammatory demyelinating polyneuropathy (the Guillain-Barré syndrome) may have bilateral facial palsy, although their limbs are usually unaffected. This is a very unusual occurrence. The Ramsay Hunt syndrome is neither recurring nor bilateral in immunocompetent individuals.

### Case Report

It had become uncomfortable for the 41-year-old man to converse with a deviation of his lips to the right, so he came to our clinic. This experiment used the Functional Anatomy of the Facial Nerve, a chart for diagnosing peripheral facial weakness, and a chart for assessing central and peripheral facial weakness. According to the results of this particular case's study, the patient's symptoms were caused by Bell's palsy.

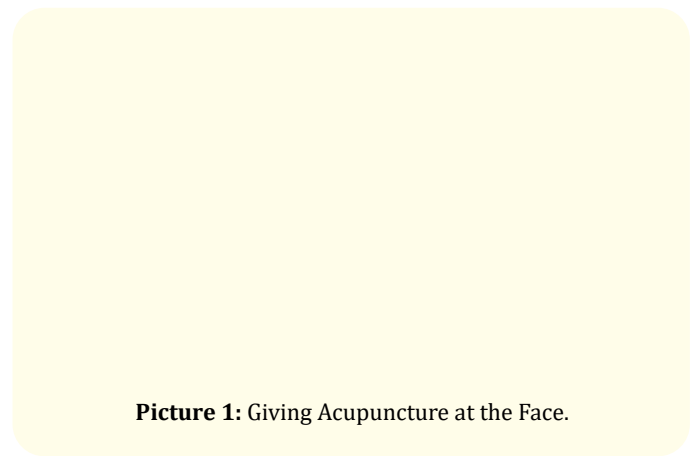
Face Weakness Chart Central and Peripheral identifies whether or not the problem is central or peripheral, which is the first step in diagnosing facial weakness. All it takes is a little observation and a few questions to get the job done. Lesions above facial nucleus in pons are always to blame for facial weakness in the contralateral hemisphere. Corticobulbar fibers go from the opposite hemisphere to innervate the cells of the facial nucleus, which in turn innervate the lower face.

As a result of hyperacusis, the stapedius muscle is paralyzed, reducing ear vibration and making sounds louder on the affected side. There is no hearing loss. Lesions near the geniculate ganglion often result in permanent loss of taste and inability to make tears because parasympathetic fibers pass via the intervening neurons in the vicinity of the ganglion. The most prevalent cause of Peripheral Facial Weakness is a facial nerve lesion in the ipsilateral facial nucleus or the face nerve in the pons, which weakens or paralyzes

all of the muscles of facial expression. Nomenclature is unlikely to change in spite of the seeming contradiction of a "central" lesion pons generating a peripheral facial paralysis. Two of the best markers of facial weakness are "Show me your teeth" and "Close your eyes" (for upper face assessment) (for testing the lower facial area). Denervation of the orbicularis oculi muscle may result in an inability to close one's eyes, whereas denervation of the risorius muscle may result in a limited mouth angle retraction.

Bell's palsy is the patient's final diagnosis after all the considerations have been taken into account. In order to lessen the patient's facial deviation, we chose to provide acupuncture at the mouth and physiotherapy (mobilization).

It's common for practitioners to begin a patient's treatment strategy with mobilization, physiotherapy, and acupuncture at face. Facial acupuncture and mobilization methods are used while working with the patient in order to enable him speaks more freely and easily in his surroundings. Results from the follow-up research were overwhelming favorable and enthusiastic, and the overall conclusion was also encouraging and hopeful. The patient's visage improved significantly after his tenth facial acupuncture session. Mouth deviation to the right, which the patient had been enduring for some time, was minimized, which provided an unexpected feeling of comfort for him.



Picture 1: Giving Acupuncture at the Face.

### Discussion

Consider that 71% of untreated patients are able to return to their pre-injury state, and 84% are able to return to a near-normal state. As a result, the 20% to 30% who haven't totally recovered are the focus of the therapy. Several studies support the idea

that therapy should begin as soon as possible and be vigorous. Decompression surgery performed on Bell's palsy patients has been known for more than 50 years to result in facial nerve swelling, which has been validated by MRI [12]. HSV has been linked in the development of Bell's palsy when it was found in the endoneurial fluid of individuals with the condition [13]. Bell's palsy is seldom recurrence. Myasthenia gravis or lesions at the base of the brain, where facial nerve leaves the pons, should be considered if there is recurrent or bilateral facial paralysis; this form of paralysis occurs in lymphoma, sarcoidosis, and Lyme disease. Patients with inflammatory demyelinating polyneuropathy (Guillain-Barré syndrome) may have bilateral facial palsy, although their limbs are usually unaffected. This is a very unusual occurrence. The Ramsay Hunt syndrome is either recurring or bilateral in immunocompetent individuals.

Studies comparing antiviral medication with no treatment for Bell's palsy have not been undertaken. An elderly patient of ours, 41, came to see us with complaints of mouth deviation to the right when speaking. To have to live with such anguish day in and day out was a horrible experience. On our own time and with our own resources, we conducted a large number of tests. The person with Bell's palsy, as shown by this sign, is the subject of this illustration. When treating the patient's condition, both facial acupuncture and physiotherapy were used in tandem. Everything worked out well in the end. After the tenth acupuncture treatment, the patient's right facial discomfort was significantly reduced. The treatment was ultimately successful nevertheless.

## Conclusion

The results of the follow-up investigation were astounding. Acupuncture treatments for the patient's mouth deviation to right during talking to relieve the patient's discomfort after the 10<sup>th</sup> session. Acupuncture has been shown to be beneficial to people suffering from Bell's palsy.

## Bibliography

1. Hauser WA., *et al.* "Incidence and prognosis of Bell's palsy in the population of Rochester, Minnesota". *Mayo Clinic Proceedings* 46 (1971): 258-264.
2. Katusic SK., *et al.* "Incidence, clinical features, and prognosis in Bell's palsy, Rochester, Minnesota 1968-1982". *Annals of Neurology* 20 (1986): 622-627.
3. Peitersen E. "The natural history of Bell's palsy". *American Journal of Otolaryngology* 4 (1982): 107-111.
4. Adour KK., *et al.* "The true nature of Bell's palsy: analysis of 1,000 consecutive patients". *Laryngoscope* 88 (1978): 787-801.
5. Diamant H., *et al.* "Prognosis of idiopathic Bell's palsy". *Archives of Otolaryngology* 95 (1972): 431-433.
6. Adour KK and Wingerd J. "Idiopathic facial paralysis (Bell's palsy): factors affecting severity and outcome in 446 patients". *Neurology* 24 (1974): 1112-1116.
7. Campbell EDR., *et al.* "Value of nerve-excitability measurements in prognosis of facial palsy". *British Medical Journal* 2 (1962): 7-10.
8. Cawthorne T and Wilson T. "Indications for intratemporal facial nerve surgery". *Archives of Otolaryngology* 78 (1963): 429-434.
9. Mutsch M., *et al.* "Use of the inactivated intranasal influenza vaccine and the risk of Bell's palsy in Switzerland". *The New England Journal of Medicine* 350 (2004): 896-903.
10. Richardson AT. "Electrodiagnosis of facial palsies". *Annals of Otolaryngology, Rhinology and Laryngology* 72 (1963): 569-580.
11. Keane JR. "Bilateral seventh nerve palsy: analysis of 43 cases and review of the literature". *Neurology* 44 (1994): 1198-1202.
12. Cawthorne T. "The pathology and surgical treatment of Bell's palsy". *Proceedings of the Royal Society of Medicine* 4 (1950): 565-572.
13. Murakami S., *et al.* "Bell palsy and herpes simplex virus: identification of viral DNA in endoneurial fluid and muscle". *Annals of Internal Medicine* 124 (1996): 27-30.