

## Facial Nerve Paralysis

One of the most disconcerting sudden cosmetic problems experienced by a patient is the onset of facial paralysis. Facial paralysis of unknown etiology is termed "**Bell's palsy**" named after Sir Terrence Bell. That term is often used for any facial paralysis, but should in reality only be applied to the group of patients with whom no other cause can be pinpointed. This paralysis does most commonly occur with rapid onset often accompanied by pain behind the ear. Manifestations include inability to close the eye, smile and wrinkle the forehead. This causes a drawing of the face toward the opposite side of the face. Drooling may accompany this as well as excess or alternatively lack of tear production.

The cause of facial paralysis may be varied, and treatment will thus vary. Occasionally it may occur with trauma either blunt or penetrating. Rarely surgical trauma will result in a paralysis. In addition systemic illnesses may result in a facial weakness. Multiple sclerosis, stroke and autoimmune diseases as well as an occasional infection have been known to involve the facial nerve. Lyme disease, for instance, will present sometimes with facial paralysis. Tumors may attack the nerve especially within the temporal bone and environs. Thus not all that causes facial paralysis is Bell's palsy. The true bell's palsy is believed to be a reactivation process of a viral infection of childhood as the likeliest cause.

Evaluation of the problem begins with the history of onset and accompanying symptoms some of whom may suggest the etiology. For instance a slow onset increases the concern for a tumorous etiology while an accompanying rash around the ear will make the viral cause much more likely. The physical examination will also afford the opportunity to see clues as to the cause of the weakness. Lastly, laboratory studies help to

solidify and rule out the various lesions mentioned above as well as others. Hearing tests and electrical testing of the nerve itself can help evaluate the degree of trouble and to better define the prognosis for the patient. These tests are available in our office laboratory for this purpose. Other studies often undertaken may include blood studies and scans of the area of interest in a given patient. Not all patients need all studies and our Lakeshore physicians will proceed as indicated in a given patient.

Once the evaluation is complete, appropriate treatment is determined. Initially in all cases attention is given to the eye. Eye protection and treatment is of utmost importance and will include artificial tears eye patching of some sort and often an ophthalmological evaluation. Occasionally, there is need to surgically help the eye to close often with insertion of a gold weight into the upper eyelid. In addition, the use of steroids and antiviral medications have proven in studies to improve the prognosis and thus the likelihood for recovery of the paralysis. These are best used within the first two weeks of the onset of the paralysis. Of course, this treatment is used for the Bell's palsy but may in the case steroids be used in the case of other etiologies for the paralysis. Facial paralysis of other etiologies should be appropriately treated including medication and or surgery if indicated. Rarely, Bell's palsy may present with such a severe case that surgery, termed facial nerve decompression, may be considered. This is beyond this discussion and indeed remains somewhat controversial. This and all treatment decisions will be discussed in the office as the condition warrants. Suffice it to say that the overall prognosis for facial paralysis is positive with the prognosis for the vast majority of Bell's palsy patients being quite good. Indeed, over 80% of such patients recover completely, another 15% recover nearly completely, and less than 5% have noticeable permanent residual weakness after true Bell's palsy.