Bell's Palsy

What is Bell's palsy?

Bell's palsy is a weakness or paralysis of the facial nerve, the nerve which controls movement of the muscles of expression on one side of the face. This causes a drooping of the affected side of the face and inability to close the eye on that side.

How does it occur?

The cause of Bell's palsy is unknown. It is theorized that the nerve is infected or inflamed by a virus or that the blood vessels supplying the nerve go into spasm. In either case, the nerve swells and it crushes itself against the bony canal through which it passes as it travels from the brain to the face. Once this happens, it can no longer transmit impulses to the facial muscles and the muscles become paralyzed (or muscle control is lost).

What are the symptoms?

The initial symptom may be an ache behind the ear of the affected side. This is followed by weakness or paralysis in the facial muscles on that side. The paralysis usually starts in the lower face. Other symptoms may occur such as tearing of the eye, decreased taste, a change in hearing, and inability to whistle or chew well. The severity of Bell's palsy can vary from a mild weakness to complete paralysis.
The speed at which the symptoms progress also can help predict the severity of the illness; the faster the progression, the more severe the illness. Development of Bell's palsy can take as little as a few hours to one or two days.

How is it diagnosed?

The diagnosis is made by exclusion. That is, your doctor must exclude other diseases and injuries that can cause facial paralysis. To do this, he or she will review your symptoms and examine you. Often other causes of facial paralysis have other symptoms as well.
Possible causes of facial paralysis other than Bell's palsy are:

- injury to the nerve as might happen with a skull fracture
- stroke
- acute or chronic ear infection
- tumor in the inner ear, middle ear, or adjacent brain
- tumor in the parotid gland (the large saliva gland just in front of the ear)
- viral illness such as shingles.

Usually an ear, nose, throat, and neurologic exam will exclude most of these other causes. A hearing test is performed to check for an inner ear tumor. Sometimes a head scan is done to exclude the possibility of a tumor in the inner ear or brain. Electrical testing on the facial nerve may be necessary to reveal the extent of damage to the nerve.

How is it treated?

Because the cause of Bell's palsy is unknown, doctors' approaches to treatment vary. Many physicians will start the patient on cortisone to try to reduce nerve swelling. If the paralysis is complete and electrical testing reveals the nerve is not responding, it may be necessary to perform surgery to relieve the pressure on it. This is best done within two weeks of the onset of the paralysis.
Since the eye on the affected side does not close completely, it's very important to protect it from dust, drying out, etc. This is done by either patching the eye or using artificial tears. In severe cases, which may last for several months, it may be necessary to sew the eyelid closed.

How long will the effects last?

The degree of weakness is very important in predicting if nerve function will return completely or not. Patients with complete paralysis, no movement of the facial muscles at all, can expect to have less than full return of each muscle movement. Patients who have at least some muscle movement can usually expect a complete recovery. Even mild cases of Bell's palsy can last several weeks. Complete paralysis may take months to reach maximum improvement.

Can I get Bell's palsy again?

Bell's palsy very rarely occurs twice in the same person. If you have facial paralysis again, another disorder is likely.