Bell's palsy

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Bell's palsy is a condition in which one side of the face becomes paralysed. It is usually temporary, and the majority of cases start to get better within three weeks.

Bell's palsy was named after Sir Charles Bell, a 19th century doctor who first described the condition and linked it to a problem with the facial nerve.

What is it?

Bell’s palsy accounts for about half of all cases of paralysis affecting the face. Medically, the condition is described as a facial paralysis that comes on suddenly and has no obvious cause (such as an injury).

The condition is fairly common. In the UK, one in 60 or 70 people will be affected at some point in their lifetime. Most cases occur among people over 40, but it can affect all age groups, including children. Men and women are equally affected, although pregnancy increases the risk threefold.

Over 80 per cent of cases of Bell’s palsy clear up without treatment in a matter of weeks. However, the condition can be distressing and many people affected are reluctant to socialise because of it. In less than one per cent of all cases, the paralysis may affect both sides of the face at once.

The causes

The exact causes of Bell’s palsy are unknown. However, it is believed that viral infection of the facial nerve is commonly involved. One possible explanation is that herpes simplex – the virus responsible for cold sores – may lie dormant in the facial nerve, then cause inflammation when it reactivates. Other viral illnesses such as mumps and rubella may also trigger Bell’s palsy. Having diabetes seems to increase the risk, and the condition may also run in families.
Symptoms

The symptoms of Bell’s palsy are likely to come on very quickly – often in a matter of hours or overnight – and there may be some sudden pain around the ear. Symptoms can also start more gradually. The main symptom is likely to be paralysis or weakness on one side of the face, along with a sagging eyebrow and difficulty closing the eye. There are several other possible symptoms:

• numbness of the face
• a dry mouth
• difficulty in speaking
• loss of taste in the front portion of the tongue
• dryness or watering of the affected eye, and a turned out lower eyelid
• dribbling when drinking or after cleaning teeth
• ear pain (especially below the ear)
• intolerance to loud noises on the affected side.

Bell’s palsy can last for just two to three weeks or much longer. In 85 per cent of cases, however, there is improvement within three weeks. An early sign of improvement is a good indication that there will be a complete recovery. Getting back a sense of taste is often a first sign of recovery from the paralysis.
Rarely, new nerve fibres that grow back after paralysis connect to the wrong facial muscle. This can result in lasting damage, and cause one or several of the following:

- blinking when attempting to smile
- involuntary movement of the corners of the mouth when closing the eyes
- twitching
- facial spasms
- the formation of false "crocodile" tears at the same time as saliva.

**Diagnosing Bell’s palsy**

Often, doctors can identify Bell’s palsy simply by examining the face and listening to a description of the symptoms. If there is any doubt, an electromyography (EMG) test may be carried out to measure the electrical activity of the facial muscles. If symptoms have not started to improve within three weeks, or are unusual, the doctor may arrange an imaging test, such as an X-ray or MRI scan, to help eliminate other possible causes of the paralysis.

**Treatment**

The condition generally gets better by itself, without any treatment at all. However, it is fairly common to be given a course of steroids within the first 24 hours or so of the onset of the symptoms. Acyclovir, an antiviral medication, may also be prescribed. However, there is only limited evidence to show these treatments are effective.

A self-help programme of physiotherapy may stimulate recovery from a mild attack of Bell’s palsy, though evidence is slight. The following may be advised:

- Massage the face using a moisturiser.
- Exercise the facial muscles in front of a mirror.
- Apply gentle heat to reduce any pain, using a microwaveable pad for example.

Bell’s palsy may make it hard to close the eyelid. These safeguards can help stop the surface of the eyeball drying out:

- Using a finger, regularly close the eyelid to moisten the eye.
- Wear protective glasses or an eye patch, to guard against dust.
- Tape the eye closed for sleeping.
- Use "artificial tears" (eye drops) to keep the eye moist – ask a pharmacist for advice.
In some cases, a small dose of a substance called botulinum toxin (Botox) can be injected into the upper eyelid. This causes it to droop temporarily, protecting the eye.

For the small number of people who have long-term paralysis from Bell’s palsy, there are several treatment options:

- A form of physical therapy known as "facial retraining" may be used.
- A surgical technique called tarsorrhaphy, which narrows the space between the eyelids, may improve eye closure.
- A gold weight may be fitted into the upper eyelid to help keep the eyelid closed (it will still open normally).
- Further use of steroid medicine.
- The hormone ACTH, which stimulates steroid production in the body.
- Surgery to relieve pressure on the facial nerve, although this is rarely recommended.
- Plastic surgery to improve permanent facial drooping.

About 10 per cent of people who have an attack of Bell’s palsy will have another attack at a later time. Women may find they have another attack when they become pregnant. Usually, the second attack affects the opposite side of the face.