

Medicine for Managers

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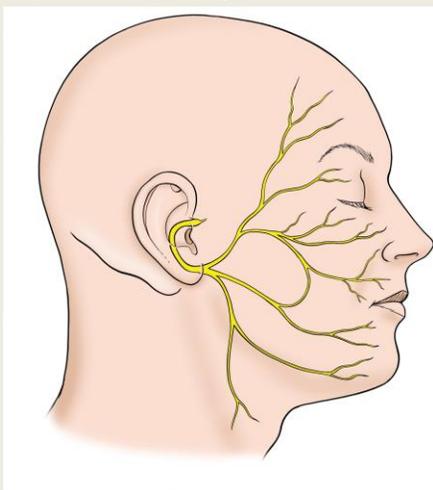


Bell's palsy

The facial palsy now known as Bell's palsy was probably first described by the Persian physician Rhazes around 900 AD. It was presented in more detail in 1683 by van der Wiel but the first detailed presentation of three patients to the Royal Society in London was made by the Edinburgh graduate, anatomist and surgeon, Sir Charles Bell, whose name remains attached to the disorder, in 1829.

In many ways the condition has moved on remarkably little. The clinical presentation is well understood but the actual pathology is still obscure. Bells palsy is the most common cause of facial palsy (accounting for around 60% of all cases) and it is estimated to affect around 15,000 patients a year, although estimates are vague because many cases presenting in primary care are not included in the statistics. It may affect people of any age but is most common in the age group 20-60.

The muscles of the face are controlled by nerve impulses from the **facial nerve**.



The nerve divides into five main branches which spread through the face supplying muscles of the forehead, cheek, mouth and lower jaw areas, as shown in the diagram.

If there is temporary interference to the nerve conduction, the result is a weakness or paralysis of the muscles supplied by the nerves.



The reason for the palsy remains shrouded in mystery. It is believed that the cause is compression of the nerve where it passes through the skull (travelling in a narrow bony tunnel) which in turn is thought to be due to

swelling associated with viral infection. No virus has ever been positively identified but the herpesvirus has been implicated in the aetiology of the disorder. However, a Bell's palsy-like condition may develop in people who have infection with the *herpes zoster* virus which is associated with vesicles in the ear canal and hearing disturbances. The disorder is known as **Ramsey-Hunt syndrome**.

Bell's palsy often comes on without warning over a period of 48-96 hours. Sufferers should seek medical advice at the earliest opportunity. It commonly lasts for between 4-26 weeks and in eight out of every ten patients the symptoms subside and resolve completely. Some patients are left with residual signs of the palsy. Of course it is frightening when it develops and some sufferers may initially be fearful that they are experiencing a stroke. The two can be distinguished because Bell's Palsy:

- (a) Does not affect anything except the face
- (b) Includes weakness or paralysis of the forehead

Apart from the obvious weakness, Bell's may be associated with other symptoms such as pains in the ear, which may be sharp and stabbing during the onset of the condition, hyperacusis (over-sensitivity to loud noise which is difficult to tolerate), dry eye on the affected side, difficulty in eating because of loss of muscle control, some slurring of speech (especially B and P) and runny nose on the affected side. The partial or complete paralysis of the muscles will result in inability to close the affected eye and the face may droop. It is three times as

common in pregnant as in non-pregnant women.

The diagnosis of Bell's palsy is initially made on the history which is usually characteristic. The examining doctor will identify which muscles are affected and can establish the nerve supply. Other causes such as stroke are usually not difficult to exclude. On occasion, there may be a need to undertake further tests and blood tests can exclude infections and scans (usually MRI) can exclude tumours as the cause.

Treatment is best started within **seventy-two** hours of the initial onset of symptoms because it appears to be associated with the best outcomes. Treatment is normally with high dose prednisolone (steroid) which appears to reduce the severity of the attack. The drug is ineffective if not started until after this time. If the evidence suggests that a viral infection is the cause of the symptoms, then an antiviral drug may be prescribed in addition. Other treatment consists of reassurance and facial care, particularly in respect of the involved eye which can become dry and ulcerated if not kept moist. At night the eye should be kept closed with *Micropore* tape.

The prognosis is reasonably good in Bell's palsy. About eight in every ten sufferers will make a full or virtually full recovery within about 12-26 weeks. For the remaining two in ten, there may well be improvement but there may be residual weakness or paralysis depending on the degree of nerve damage. In such patients physiotherapy *may* be helpful and specialists in neurological damage of this sort may be able to use *Botulinum toxin* to relax unwanted

movements. Disappointing outcomes are more likely if the patient is over 65, suffered pain during the initial phase, experienced complete rather than partial paralysis, had concurrent chronic illness or if the symptoms had not started to recover within six-eight weeks. Long term complications are relatively rare.

So, the risk of the condition has been estimated at about one in sixty-five over a lifetime. Certainly, most people know sufferers and famous people who have had it include George Clooney and Pierce Brosnan and the 2013 X-Factor winner Sam Bailey. Advice is not to panic and seek rapid medical advice. Chances are that it will improve and recover.

Have a great 2015.

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