Bell's palsy

Summary

- Bell's palsy is a paralysis or weakness of the muscles on one side of the face.
- The cause is unknown, although infection or autoimmune responses are suspected.
- The majority of people with Bell's palsy, around 90 per cent, will recover completely with time.

Bell's palsy is a paralysis or weakness of the muscles on one side of the face, with young adults of either sex more susceptible for unknown reasons.

The facial nerve services the muscles of the face, the ear, salivary and tear glands, and provides some of the sensations of taste on the tongue. This nerve enters the skull via a small opening in the petrous temporal bone at the base of the skull.

In Bell's palsy, the facial nerve swells and the resulting inflammation disrupts the relay of nervous system messages. The paralysis can be partial or total. It is thought that the inflammation and swelling of the facial nerve is caused by some type of viral infection or autoimmune system response.

Bell's palsy is characterised by a droopy appearance around the eye and mouth on the affected side of the face. It is caused by swelling of the facial nerve at the point where it passes through a small opening in the skull. The pinched and swollen nerve becomes inflamed, which interferes with the nerve's proper functioning. The reason for the swelling is unknown, although infection or autoimmune responses are suspected.

Bell's palsy usually resolves by itself within a few months. Early treatment with corticosteroids may reduce severity.

**Symptoms of Bell's palsy**

The symptoms of Bell's palsy include:

- paralysis or weakness on one side of the face
- numbness
- pain around the ear
- the eye can't fully close
- the mouth droops
- the face feels heavy
- foods taste slightly different.

**Diagnosis of Bell's palsy**

A variety of other conditions can cause facial paralysis, including trauma, stroke, certain tumours and infections. It is important to rule out these other potential causes. Bell's palsy is diagnosed in a number of different ways, including clinical examination.

The person is typically asked to raise their eyebrows, close their eyes and smile. If the person has Bell's palsy, their eyebrows will rise asymmetrically, they won't be able to close the affected eye and one side of the mouth will droop. Special scans, including CT and MRI scans, may be used to exclude other causes.

**Treatment for Bell's palsy**

The majority of people with Bell's palsy, around 90 per cent, will recover completely with time, although the paralysis may last for up to one year in severe cases. However, the remaining 10 per cent will experience some
degree of permanent paralysis. Older people with pre-existing high blood pressure are at greater risk of this complication.

Treatment options can include:
- artificial tears to keep the affected eye lubricated
- a patch to protect the affected eye
- using tape to close the affected eyelid at night
- medications such as corticosteroids to help reduce the swelling of the facial nerve
- pain-relieving medications
- massage
- facial exercises
- botox injections may be useful if, during nerve recovery, unexpected involuntary movements of the face occur
- surgery, although this is an unusual form of treatment and rarely effective.

During recovery from Bell’s palsy

During regeneration and repair of the facial nerve, some neural fibres may take an unusual course and connect to neighbouring muscle fibres. This produces unusual neurologic pathways. When voluntary movements are initiated, they are accompanied by involuntary movements such as eye closure, with lip pursing or mouth grimacing that occurs during blinking of the eye.

Where to get help
- Your doctor

Things to remember
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