

Bell's Palsy: A Facial Paralysis

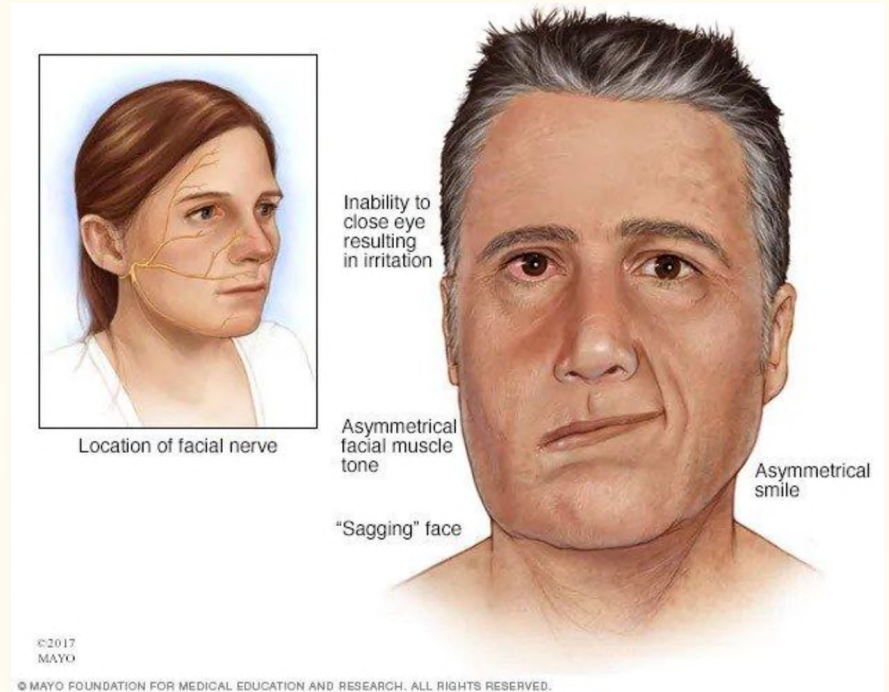
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What is Bell's palsy?

Bell's palsy is an unexplained episode of facial muscle weakness or paralysis.

It begins suddenly and worsens over 48 hours. This condition results from damage to the facial nerve (the 7th cranial nerve).

Pain and discomfort usually occur on one side of the face or head. Bell's palsy can strike anyone at any age.



What are the causes of Bell's palsy?

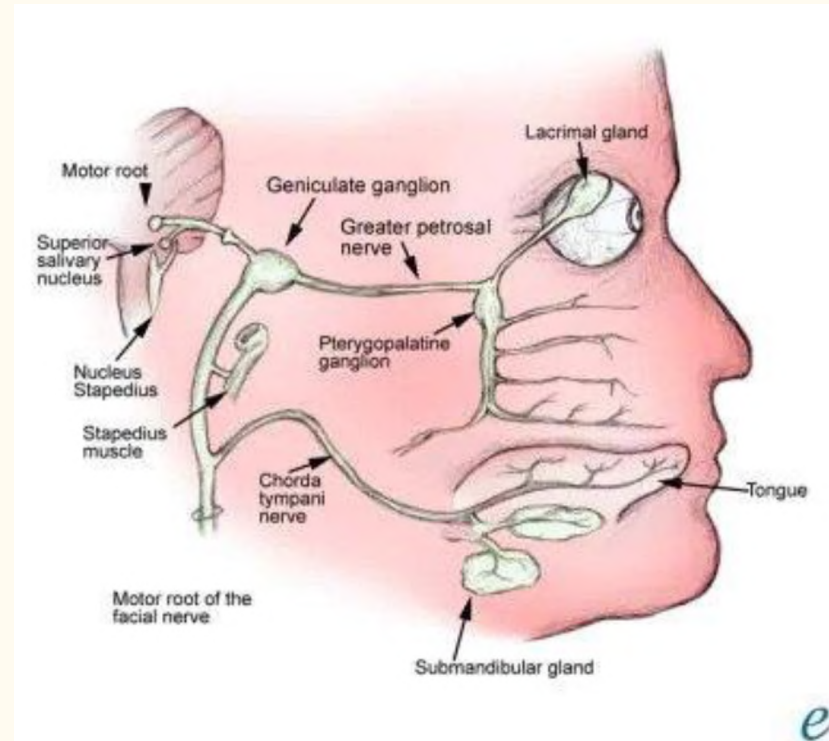
Bell's palsy is considered an idiopathic condition, which means **the cause of the inflammation is not known** and the exact pathophysiology remains unsure.

Viral infections play a role in the development of Bell's palsy. In particular, herpes simplex 1 virus (a common cause of cold sores) may be responsible for a large number of cases. Other viruses that have a link to Bell's palsy include:

- Adenovirus (respiratory conditions)
- Coxsackievirus (hand-foot-mouth disease)
- Cytomegalovirus
- Epstein-Barr (infectious mononucleosis)
- Herpes zoster (chickenpox and shingles)
- Rubella (German measles)

Pathophysiology

- After causing primary infection in the form of cold sores (clusters of small fluid-filled blisters on the lips, mouth or nose), the virus travels along the neuron to the geniculate ganglion.
- There, a lifelong silent infection is established. The virus can be reactivated when the immune defenses are low, causing local damage to the nerve.
- The inflammation compresses the nerve partly or fully, so that the nerve stops working until the inflammation ceases.



Symptoms

Symptoms of Bell's palsy include:

- Sudden weakness or paralysis on one side of your face that causes it to droop. This is the main symptom. It may make it hard for you to close your eye on that side of your face.
- Drooling from one side of the mouth.
- Eye problems, such as excessive tearing or a dry eye.
- Loss of ability to taste.
- Pain in or behind your ear.
- Headache.

Diagnosis

The doctor may diagnose Bell's palsy by asking questions, such as about how the symptoms developed. He or she will also give a physical and neurological exam to check facial nerve function.

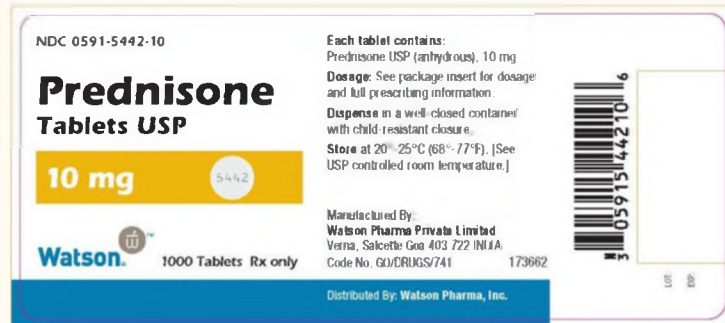
If the cause of the symptoms is not clear, a patient may need other tests, such as blood tests, an MRI, a CT scan, or an electromyography.



Treatment

Patients with Bell's palsy should be treated within three days of the onset of symptoms with a seven-day course of oral acyclovir (Zovirax) or valacyclovir (Valtrex), plus a tapering course of oral prednisone.

A doctor should also prescribe artificial tears in case of the reduction in tear production.



Other treatment

Those who have suffered from a more serious nerve damage require further treatment, including:

1. Mime therapy (a set facial exercises, such as tightening or relaxing facial muscles to make them stronger)
2. Massages
3. Plastic surgery
4. Botox

References

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Thank you for attention!
