

Facial Nerve Lesions



PLAY PICMONIC

Etiology

Diabetes Mellitus

[Dyed-bead-pancreas](#)

Diabetes mellitus is a medical condition caused by impaired production of insulin or resistance to its effects. It is often complicated with neuropathies, including the facial nerve neuropathy due to the microvascular ischemia and imbalance between nerve fiber damage and repair.

Sarcoidosis

[Shark-koi-fish](#)

Sarcoidosis is an autoimmune condition characterized by a widespread formation of noncaseating granulomas. Granulomas can then impinge on almost any organ or nerve, causing dysfunction. For example if the inflammation affects the facial nerve or the surrounding tissues, patients can develop facial nerve palsy.

Tumors

[Tumor-guy](#)

Tumors, particularly parotid gland malignancies, can compress or invade the facial nerve and compromise its function. The involvement of the facial nerve can be one of the early signs of an invasive disease.

Herpes Simplex Virus (HSV)

[Herpes-harp Virus](#)

Herpes simplex virus (HSV) is a viral disease from the herpesviridae family. This family of viruses is enveloped and has double-stranded linear DNA. There are two types of herpes simplex virus. HSV type 1 becomes latent in the trigeminal ganglia while type 2 HSV becomes latent in the sacral ganglia. HSV type 1 reactivation can sometimes result in facial nerve palsy.

Bell's palsy

[Broken bell](#)

Bell's palsy is the most common cause of facial nerve palsy. Bell's palsy is a medical condition that is characterized by unilateral facial muscle paralysis, hyperacusis, and altered taste sensation. It is usually associated with a recent upper respiratory viral infection and the compromised function of the nerve is likely caused by the swelling of the nerve-related to the infection. HSV and zoster are two common viruses associated with it.

Varicella Zoster Virus (VZV)

Varsity Zorro Virus

Varicella-zoster virus (VZV) is third of the eight viruses in the herpesviridae family and is the cause of chicken-pox and shingles. This virus is an enveloped double-stranded linear DNA virus. Ramsay Hunt syndrome occurs when the virus reactivates in the geniculate ganglion of the facial nerve. This syndrome can manifest with painful rash, facial paralysis and hearing loss in the affected ear.

Lyme Disease

Lime-castle

Lyme disease is an infection caused by the spirochete, *Borrelia burgdorferi*, the deer tick or black-legged tick. There are three stages of the disease: early localized (stage I); early disseminated (stage II), and late disseminated stage (stage III).

The disease can involve multiple systems including the peripheral nervous system and can cause unilateral/bilateral facial nerve palsy, this usually occurs in the early disseminated stage.

Treatment

Corticosteroids

Quarter-on-steroids

Corticosteroids can be used for the treatment of facial nerve palsy if it is caused by inflammation and/or swelling of the nerve or its surrounding soft tissues.

Acyclovir

Apple-cyclops

Acyclovir is an antiviral drug that is an analogue of guanosine. It is primarily used for the treatment of herpes simplex virus infections, but it can also be used for the treatment of facial nerve lesions if the etiology is viral.