BELL’S PALSY

Definition

Bell’s palsy is one of the most common neurologic disorders affecting the cranial nerves. It is an abrupt, unilateral, peripheral facial paresis or paralysis without a detectable cause. This syndrome of idiopathic facial paralysis was first described more than a century ago by Sir Charles Bell, yet much controversy still surrounds its aetiology and management.

A popular theory champions inflammation of the facial nerve. The facial nerve is subjected to tight confines on its journey through the facial canal. It seems logical that various inflammatory, demyelinating, ischemic, or compressive processes may impair neural conduction at this unique anatomic site.

Aetiology / Risk Factors

The incidence of Bell’s palsy is approximately 23 cases per 100,000 persons. The condition affects approximately 1 person in 65 in a lifetime. Bell’s palsy can cause aesthetic, functional, and psychological disturbances in patients who have residual nerve dysfunction during their recovery phase or in patients with incomplete healing:

- Partial paralysis
- Motor synkinesis (involuntary movement accompanying a voluntary movement)
- Autonomic synkinesis (involuntary lacrimation after a voluntary muscle movement)

Incidence of Bell’s palsy appears to be slightly higher in persons of Japanese descent. No difference exists in sex distribution in patients with Bell’s palsy. Age affects the probability of contracting Bell’s palsy. The incidence is highest in persons aged 15-45 years. It is less common in those younger than 15 years or older than 60 years.

Viral infections: Clinical and epidemiologic data lend credence to an infectious origin which triggers an immunologic response, resulting in damage to the facial nerve. Pathogens include herpes simplex virus type 1 (HSV-1) and type 2 (HSV-2); human herpesvirus (HHV); varicella zoster virus (VZV); Mycoplasma pneumoniae; Borrelia burgdorferi; influenza B; adenovirus; coxsackievirus; Ebstein-Barr virus; hepatitis A, B, and C; cytomegalovirus (CMV); and rubella virus.

Symptoms & Signs

Postauricular pain: Almost 50% of patients experience pain in the mastoid region. The pain frequently occurs simultaneously with the paresis, but precedes the paresis by 2-3 days in about 25% of patients.

Tear flow: Two thirds of patients complain about tear flow. This is due to the reduced function of the orbicularis oculi in transporting the tears. Fewer tears arrive at the lacrimal sac and overflow occurs. The production of tears is not accelerated.

Altered taste: While only one third of patients complain about taste disorders, four fifths of patients show a reduced sense of taste. This may be explained by only half the tongue being involved.

Dry eyes

Hyperacusis: Impaired tolerance to typical levels of noise due to an increased irritability to the sensory neural mechanism.

The most common complaint is of weakness on one side of the face.
**Diet and Lifestyle**

Eliminate refined foods, alcohol, caffeine, saturated fats (e.g. animal products) and additives (especially monosodium glutamate and aspartame).

Avoid food allergens and sensitivities. The most common allergens are wheat, dairy, eggs, soy, citrus, tomatoes, corn, chocolate, fish, and peanuts. An elimination/challenge trial may be helpful. Remove suspected allergens from the diet for two weeks. Reintroduce foods at the rate of one food every three days. Watch for reactions which may include gastrointestinal upset, mood changes, headaches, and exacerbation of symptoms. Do not perform a challenge with peanuts if there is a history of anaphylaxis.

Eat a diet high in protein and anti-inflammatory oils (nuts, seeds, and cold-water fish). Include orange, yellow, and dark green vegetables. Eat whole grains in small amounts.

Emphasise foods that are high in magnesium such as green leafy vegetables and nuts.

Manage stress and get enough sleep to support healthy immune function.