Bell palsy

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1 Bell palsy accounts for 80% of cases of unilateral lower motor neuron facial paralysis[1]

It has an annual incidence of 20–30 cases per 100 000 population[2] and can occur at any age; median age at onset is 40 years.[2] The cause is unknown, although the herpes simplex viral genome is detected in the facial nerve endoneurial fluid in 79% of cases.[1–3]

2 Onset is sudden and paralysis progresses within hours, affecting muscles of facial expression, including those in the forehead

Complete paralysis includes impaired forehead wrinkling, ptosis, incomplete lid closure and a flattened nasolabial fold.[4] Bell palsy is diagnosed clinically, and no tests are indicated unless the presentation is atypical.[1] A neurologic examination should look for evidence of stroke, multiple sclerosis and brain cancers. Bilateral presentations should raise suspicion for a systemic disease such as sarcoidosis, Guillain–Barré syndrome or Lyme disease.

3 Without treatment, 70% of patients with complete and 94% with incomplete paralysis will recover facial function within 6 months[4]

The House–Brackman severity score can be used to assess recovery.[4,5] Recurrence occurs in 7%–8% of patients.[2,3] Older age, hypertension, loss of taste and complete paralysis are risk factors for a poorer prognosis.[2] Persistent complications include abnormal facial muscle movement, tearing and lacrimation.[1–4]

4 Patients with Bell palsy should receive corticosteroids within 48 hours of symptom onset, regardless of severity

Treatment with a total of 450–500 mg prednisone over 10 days has a number needed to treat of 8 to achieve a House–Brackman score of grade 2 or less after 4 months for patients with severe or complete paralysis.[5] Antiviral medications can be considered in severe cases.[4,5] Eye protection (sunglasses, eye patch, lubricating tears or ointments) should be used routinely to prevent corneal abrasions, ulceration and keratitis.[4,5] Other options for persistent symptoms include facial physiotherapy for weakness, botulinum toxin injections for facial asymmetry and surgery to facilitate eyelid closure.[3,4]

5 Investigation for upper motor neuron lesions or local compressive disorders should be considered for patients with new symptoms, progressive weakness or incomplete recovery[4,5]

New symptoms warrant investigation at any time; incomplete recovery should be investigated at 3 months or later. Clinicians should consider brain imaging (computed tomography or magnetic resonance imaging), electromyography and referral to a neurologist or otolaryngologist.

References

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