

# Bell palsy

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## 1 Bell palsy accounts for 80% of cases of unilateral lower motor neuron facial paralysis<sup>1</sup>

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

## 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.<sup>4</sup> Bell palsy is diagnosed clinically, and no tests are indicated unless the presentation is atypical.<sup>1</sup> 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<sup>4</sup>

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

## 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.<sup>5</sup> Antiviral medications can be considered in severe cases.<sup>4,5</sup> Eye protection (sunglasses, eye patch, lubricating tears or ointments) should be used routinely to prevent corneal abrasions, ulceration and keratitis.<sup>4,5</sup> Other options for persistent symptoms include facial physiotherapy for weakness, botulinum toxin injections for facial asymmetry and surgery to facilitate eyelid closure.<sup>3,4</sup>

## 5 Investigation for upper motor neuron lesions or local compressive disorders should be considered for patients with new symptoms, progressive weakness or incomplete recovery<sup>4,5</sup>

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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