Do corticosteroids relieve Bell’s palsy?

EVIDENCE-BASED ANSWER

**A** Yes, but not severe disease. Corticosteroids likely improve facial motor function in adults with mild to moderate Bell’s palsy (strength of recommendation [SOR]: B, meta-analysis of heterogeneous randomized controlled trials [RCTs]). Corticosteroids are probably ineffective in treating cosmetically disabling or severe disease (SOR: A, meta-analysis and large RCT).

**Improvement seen with corticosteroids in mild to moderate palsy**

A 2010 Cochrane review of 8 RCTs (7 double-blind) compared corticosteroids with placebo in 1569 patients with Bell’s palsy, 24 months to 84 years of age.1 The definition of mild and moderate severity of symptoms differed across studies, as did corticosteroid doses. Only 6 trials required initiation of therapy within 3 days.

More patients in the corticosteroid group had completely recovered facial motor function at 6 months than patients taking placebo (77% vs 65%; 7 trials, 1507 patients; relative risk [RR]=0.71; 95% confidence interval [CI], 0.61-0.81; number needed to treat=10). Improvement in cosmetically disabling or severe disease wasn’t significant (5 trials, 668 patients; RR=0.97; 95% CI, 0.44-2.2).

**Prednisolone with and without an antiviral reduces facial weakness**

A 2012 prospective, randomized, double-blind, placebo-controlled, multicenter trial evaluated prednisolone (60 mg/day for 5 days, tapered for 5 days) in 829 adults, 18 to 75 years of age.2 Patients were randomized to one of 4 groups: placebo plus placebo, prednisolone plus placebo, valacyclovir plus placebo, and prednisolone plus valacyclovir. Facial function was assessed over 12 months using the Sunnybrook grading system (scored from 0 to 100; 0=complete paralysis, 100=normal function).

Compared to the groups not receiving any prednisolone, the 2 groups that received prednisolone, either with placebo or valacyclovir, had significantly less facial weakness at 12 months for both mild and moderate palsy (Sunnybrook scores <90: 184 patients; difference= −10.3%; 95% CI, −15.9 to −4.7; P<.001; Sunnybrook score <80: 134 patients; difference= −6.9%; 95% CI, −11.9 to −1.9; P=.01; Sunnybrook score <70: 98 patients; difference= −7.8%; 95% CI, −12.1 to −3.4; P<.001). Patients with severe disease (Sunnybrook score <50) didn’t show significant improvement (56 patients; difference= −2.9%; CI, −6.4 to 0.5; P=.10).

**Guideline recommends corticosteroids for Bell’s palsy**

The 2014 American Academy of Neurology evidence-based guideline reviewed all studies of the use of steroids in Bell’s palsy published after the original 2001 guideline.3 They found 2 high-quality RCTs, both of which are included in the 2010 Cochrane review. The 2014 guideline recommends corticosteroids for every patient who develops Bell’s palsy unless a medical contraindication exists (2 Class 1 studies [RCTs], Level A [must prescribe or offer]).

References
