



Q/ 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]).

JFP

References

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2. Berg T, Bylund N, Marsk E, et al. The effect of prednisolone on sequelae in Bell's palsy. *Arch Otolaryngol Head Neck Surg.* 2012;138:445-449.
3. Gronseth G, Paduga R, American Academy of Neurology. Evi-

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