Antiviral Agents Added to Corticosteroids for Early Treatment of Adults With Acute Idiopathic Facial Nerve Paralysis (Bell Palsy)

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Introduction
Bell palsy affects 1 in 60 persons at some stage of their life. The association of oral corticosteroids alone with corneal protection in patients with Bell palsy is well established. This JAMA Clinical Evidence Synopsis summarizes a Cochrane review that evaluated the association of antiviral therapies plus oral corticosteroids compared with oral corticosteroids alone for patients presenting within 72 hours of onset of Bell palsy.

Summary of Findings
Among patients receiving oral corticosteroids for Bell palsy, the addition of antiviral therapy was associated with a lower incomplete recovery rate of 11.5% (77/672) compared with 16.8% (108/643) for those treated with placebo or no treatment (risk ratio [RR], 0.61 [95% CI, 0.39-0.97]; P = .03). The number needed to treat for complete recovery after 3 to 12 months was 19 patients.

Treatment with corticosteroids alone was associated with better outcomes for 29.4% (113/384) compared with 15.1% (58/384) for those treated with antivirals alone (RR, 2.82 [95% CI, 1.09-7.32]; P = .03).

Treatment with antivirals alone was associated with no benefit compared with placebo (30.6% [101/330] vs 27.7% [91/328], respectively; RR, 1.10 [95% CI, 0.87-1.40]; P = .41). For people with severe Bell palsy (grades of V or VI on the House-Brackmann scale or the equivalent on other scales), therapy with antivirals plus corticosteroids was associated with a lower rate of incomplete recovery at 6-month follow-up of 17.2% (41/238) compared with the rate of 28.8% (69/240) for patients treated with corticosteroids alone (RR, 0.64 [95% CI, 0.41-0.99]; P = .049).

In 2 studies involving 469 participants, antiviral therapy plus corticosteroids was associated with a lower rate of long-term sequelae (motor synkinesis and crocodile tears) of 11% (26/237) compared with the rate of 19.4% (45/232) for those treated with corticosteroids plus placebo or no treatment (RR, 0.56 [95% CI, 0.36-0.87]; P = .01). Adverse event data were available in 3 studies including 877 participants. In trials comparing antivirals plus corticosteroids with corticosteroids plus placebo or no treatment, the adverse event rate was 12.5% (55/440) vs 10.8% (47/437), respectively (RR, 1.18 [95% CI, 0.83-1.69]; P = .42).

Discussion
Among 1315 patients who participated in 8 randomized clinical trials, the addition of an antiviral agent (acyclovir, valacyclovir, or famcyclovir) to oral corticosteroids was associated with improved outcomes when combined with oral corticosteroids in patients presenting within 72 hours of the onset of Bell palsy.
lower rates of incomplete recovery and long-term sequelae at 3 to 12 months compared with oral corticosteroids alone.

Limitations
The analyses are limited by data heterogeneity, imprecision of the study results, and risk of bias. Some of the trials were small; other trials did not meet current best standards in allocation concealment and blinding. Only 4 studies provided data on severe cases (n = 487). There were no studies that included children.

Comparison of Findings With Current Practice Guidelines
Guidelines from the American Academy of Otolaryngology and the Canadian Society of Otolaryngology recommend using corticosteroids alone but suggest that clinicians consider combining corticosteroids with antiviral therapy in severe cases.

Data from this review suggest that the combination of oral corticosteroids plus antiviral therapies is associated with lower rates of incomplete recovery compared with oral corticosteroids alone (RR, 0.61; 95% CI, 0.39-0.97). However, the quality of the evidence is low.

Areas in Need of Further Study
An individual patient meta-analysis that includes an analysis according to severity of the Bell palsy and patient subgroups based on age may be warranted to identify subgroups of patients, such as children and patients with facial paralysis of varying severity, who may benefit from the addition of antivirals to corticosteroids and those who may not.

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Submissions: We encourage authors to submit papers for consideration as a JAMA Clinical Evidence Synopsis. Please contact Dr McDermott at mdm608@northwestern.edu.

REFERENCES