Study evaluates use of corticosteroids and antiviral agents for treatment of Bell Palsy

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Among patients with Bell Palsy, a facial paralysis with unknown cause, treatment with corticosteroids is associated with a reduced risk of an unsatisfactory recovery, and treatment with a combination of corticosteroids and antiviral agents may be associated with additional benefit, according to a systematic review and meta-analysis of previously published studies, reported in the September 2 issue of *JAMA*.

In background information provided by the authors, they note that Bell Palsy "is an acute weakness or paralysis of the facial nerve," and has an annual incidence of 20 to 30 per 100,000 population. "While 71 percent of untreated patients will completely recover and 84 percent will have complete or near normal recovery, the remainder will have persistent to moderate to severe weakness, facial contracture, or synkinesis [involuntary movement]." The authors explain that a herpes infection likely causes the disorder. DNA samples from patients have yielded herpes simplex virus type 1 (HSV-1). Varicella zoster virus (VZV) reactivation is also associated with Bell Palsy.

John R. de Almeida, M.D., from Sunnybrook Hospital and the University of Toronto, Canada, and colleagues conducted a search of the medical literature for randomized controlled trials comparing treatment with either corticosteroids or antiviral agents with a control measuring unsatisfactory facial recovery (four months or more), unsatisfactory short-term recovery (six weeks to less than four months), synkinesis and autonomic dysfunction, or adverse effects. The authors identified 854 studies, of which 18 were eligible for inclusion for evaluation. The 18

studies included 2,786 patients and were conducted in 12 countries and five continents.

"… high-quality evidence suggests that corticosteroids alone reduce the risk of unsatisfactory recovery by 9 percent in absolute terms, with a NNTB (number of patients needed to treat for one patient to experience benefit) of 11," the authors report. "Corticosteroid therapy combined with antiviral agents reduced the risk of unsatisfactory recovery compared with antiviral agents alone. Corticosteroids were also associated with a 14 percent absolute risk reduction of synkinesis and autonomic dysfunction (NNTB, 7; moderate quality of evidence). Corticosteroids were not associated with an increased risk of adverse effects."

"Our results suggest a possible incremental benefit of antiviral agents in addition to corticosteroids, with an absolute risk reduction of 5 percent compared with corticosteroids alone. This effect, however, is not definitive and did not quite reach statistical significance," the authors write. "Further primary studies are needed to definitively establish - or refute - an incremental benefit of combined therapy compared with corticosteroid mono therapy," the authors conclude.

More information: *JAMA*. 2009; 302[9]:985-993.

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