Botulinum toxin may be beneficial for isolated, essential head tremor

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For patients with isolated or essential head tremor, injection of
botulinum toxin into each splenius capitis muscle on day 0 and during week 12 is more effective than placebo for reducing tremor severity, according to a study published in the Nov. 9 issue of the *New England Journal of Medicine*.

Ana Marques, M.D., Ph.D., from Université Clermont-Auvergne in France and colleagues enrolled adult patients with essential or isolated head tremor in a multicenter trial. A total of 117 patients were randomly assigned to receive botulinum toxin type A or placebo (62 and 55 patients, respectively) injected under electromyographic guidance into each splenius capitis muscle on the day of randomization (day 0) and during week 12, and were included in the intention-to-treat analysis.

The researchers found that improvement of at least 2 points on the Clinical Global Impression of Change (CGI) scale at week 6 after the second injection (week 18) occurred in 31 and 9 percent of patients in the botulinum toxin and placebo groups, respectively (relative risk, 3.37). At six and 12, but not 24 weeks, analyses of secondary outcomes were generally supportive of the primary outcome analysis. About half of the patients in the botulinum toxin group had adverse events, including head and neck pain, posterior cervical weakness, and dysphagia.

"The percentage of patients with improvement in head tremor, prespecified as improvement by at least two points on the CGI scale at week 18 (primary outcome), was higher in the botulinum toxin group than in the placebo group," the authors write.

Several authors disclosed ties to the pharmaceutical industry.
