Some common treatments for sinus infections may not be effective

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A comparison of common treatments for acute sinusitis that included an antibiotic and a topical steroid found neither more effective than placebo, according to a study in the December 5 issue of JAMA.

Acute sinusitis (sinus infection) is a common clinical problem with symptoms similar to other illnesses, and is often diagnosed and treated without clinical confirmation. Despite the clinical uncertainty as to a bacterial cause, antibiotic prescribing rates remain as high as 92 percent in the United Kingdom and 85 percent to 98 percent in the United States, according to background information in the article.

“Because there are no satisfactory studies of microbiological etiology from typical primary care patient practices, wide-scale overtreatment is likely occurring,” the authors write. Concerns about wide-spread antibacterial use include increasing antibiotic resistance in the community. Anti-inflammatory drugs such as topical steroids are also used as a treatment and may be beneficial, but there has been limited research.

Ian G. Williamson, M.D., of the University of Southampton, England, and colleagues conducted a double-blind randomized placebo-controlled trial to determine the effectiveness of the antibiotic amoxicillin and topical steroid budesonide in acute maxillary sinusitis (rhinosinusitis; inflammation of the nasal cavity and sinuses). The study included 240 adults with acute nonrecurrent sinusitis treated at 58 family practices between November 2001 and November 2005. Patients were

randomized to 1 of 4 treatment groups: antibiotic and nasal steroid (500 mg of amoxicillin 3 times per day for 7 days and 200 ìg of budesonide in each nostril once per day for 10 days); placebo antibiotic and nasal steroid; antibiotic and placebo nasal steroid; placebo antibiotic and placebo nasal steroid.

The researchers found that the proportions of patients with symptoms lasting 10 or more days were 29 of 100 (29 percent) for amoxicillin vs. 36 of 107 (33.6 percent) for no amoxicillin; and 32 of 102 (31.4 percent) for topical budesonide vs. 33 of 105 (31.4 percent) for no budesonide. Secondary analysis suggested that nasal steroids were significantly more effective in patients with less severe symptoms at baseline.

“Our main conclusions are that among patients with the typical features of acute bacterial sinusitis, neither an antibiotic nor a topical steroid alone or in combination are effective in altering the symptom severity, the duration, or the natural history of the condition. Topical steroids are likely to be effective in those with such features but who have less severe symptoms at presentation to the physician,” the authors write.

Source: JAMA