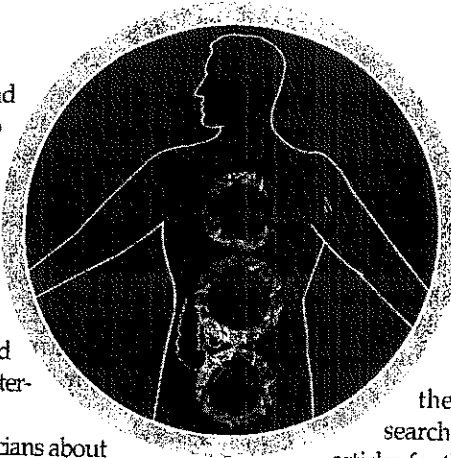


"The Somatic Connection" highlights and summarizes important contributions to the growing body of literature on the musculoskeletal system's role in health and disease. This section of *JAOA—The Journal of the American Osteopathic Association* strives to chronicle the significant increase in published research on manipulative methods in the United States and the renewed interest in manual medicine internationally, especially in Europe.

Designed to inform osteopathic physicians about significant musculoskeletal research being published in journals other than the *JAOA*, "The Somatic Connection" gives special attention to research articles directly related to the tenets and principles of osteopathic medicine.



Some research articles featured in "The Somatic Connection" may focus on tests of the efficacy of manipulative methods in a variety of clinical situations. Other articles may focus on other aspects of the musculoskeletal system, including the mechanism of chronic pain and interventions other than spinal manipulation.

To identify research articles to feature, the editors of "The Somatic Connection" search multiple electronic databases and assess articles for their scientific validity. To submit scientific reports for possible inclusion in "The Somatic Connection," readers are encouraged to contact section editors *JAOA* Associate Editor Felix J. Rogers, DO (fjrogers@aol.com), or Michael A. Seffinger, DO (mseffinger@westernu.edu).

OMT Improves Outcomes in Children With Recurrent Acute Otitis Media

Current clinical practice guidelines for the clinical management of recurrent acute otitis media (AOM) in children recommend judicious use of antibiotics and surgical placement of tympanostomy tubes when effusion persists. In addition to providing conventional medical care, osteopathic physicians have long used osteopathic manipulative treatment (OMT) to treat somatic dysfunction related to recurrent AOM.

This study was a multisite, prospective, randomized controlled trial that evaluated the efficacy of OMT as an adjuvant therapy in routine pediatric care for patients with AOM aged 6 months to 6 years. Study inclusion criteria specified that potential subjects must have had a documented diagnosis of recurrent AOM with symptoms clear for at least 2 weeks between episodes and either three episodes of AOM in the previous 6 months or four episodes in the previous year. In addition, exclusion criteria specified that potential subjects could not be current candidates for surgical intervention. Potential subjects were also excluded from study if they had immunologic or chromosomal anomalies, congenital malformation of the head, prior manual therapy, or previous otorhinolaryngologic surgery. Outcomes measured at regularly scheduled intervals during the 6-month study period were antibiotic use, AOM episodes, audiometry, behavior, surgical intervention, and tympanometry.

The OMT procedures used were chosen at the discretion of the treating physician, each of whom was an American-trained DO and an experienced OMT instructor. The entire body, including the head, was included in osteopathic evaluation and manipulative treatment. Initially, patients were given weekly treatments of 15 to 25 minutes' duration for 3 weeks. Treatment frequency then tapered downward to

biweekly treatments for 6 weeks, and finally monthly treatments for 3 months.

Seventy-six patients were enrolled and randomly assigned in a 60:40 ratio to either a standard care only group (n=45) or a standard care with adjuvant OMT group (n=31). As expected, twice as many patients in the control group dropped out of the study (13 vs 6). Fifty-seven patients (control, 32; OMT, 25) completed the study protocol. At each study site, an allopathic pediatrician managed standard care protocols and was blinded to group assignment and study outcomes. Osteopathic physicians providing adjuvant OMT were blinded to patient clinical course.

Adjusting for the baseline frequency before study entry, OMT patients had fewer episodes of AOM (mean group difference per month, -0.14 [95% confidence interval, -0.27 to 0.00]; $P=.04$), fewer surgical procedures (1 vs 8 procedures; $P=.03$), and more mean surgery-free months (6 vs 5.25 months; $P=.01$). Baseline and final tympanograms obtained by the audiologist showed an increased frequency of more normal tympanogram types in the OMT group, with an adjusted mean group difference of 0.55 (95% confidence interval, 0.08 to 1.02; $P=.02$). No adverse reactions were reported.

The authors recommend a larger study be conducted. In addition, they conclude that there is a potential benefit of OMT as adjuvant therapy in children with recurrent AOM; it may prevent or decrease surgical intervention or antibiotic overuse. —M.A.S.

Mills MV, Henley CE, Barnes LL, Carreiro JE, Degenhardt BF. The use of osteopathic manipulative treatment as adjuvant therapy in children with recurrent acute otitis media. *Arch Pediatr Adolesc Med*. 2003;157:861-866. Available at: <http://archpedi.ama-assn.org/cgi/content/full/157/9/861>. Accessed November 13, 2006.