

sis: Sequential therapy appears superior to standard therapy for *Helicobacter pylori* infection in patients naïve to treatment. *Ann Intern Med.* 2008;148(12):923-931.

Saline Irrigation More Effective Than Spray for Nasal Symptoms

Clinical Question

Is nasal washing more effective than saline spray at decreasing symptoms in patients with chronic nasal or sinus symptoms?

Bottom Line

Nasal irrigation (nasal washing) using a stream of normal saline, is more effective in decreasing general nasal or sinus symptoms than saline spray. The saline can be made at home, purchased as a kit, or administered using a neti pot. Direct your patients to an online source of video (e.g., www.youtube.com) to see how it is administered. (LOE = 1b)

Study Design

Randomized controlled trial (nonblinded)

Funding

Industry

Allocation

Concealed

Setting

Outpatient (specialty)

Synopsis

These U.S. researchers evaluated 121 adults with chronic nasal and sinus symptoms using community advertisements. The patients were men and women (average age = 46 years) who reported symptoms of stuffiness, congestion, or thick or discolored nasal discharge. Most reported symptoms “often” or “always” for >6 months. Patients were excluded if they had recent sinus surgery or respiratory infection. The patients were randomized, using concealed allocation,

to be treated with isotonic nasal saline as a spray or as a large-volume nasal irrigation flowed into a nostril and drained out of the mouth. The patients were asked to use the treatment twice daily for 2 months along with their usual treatments. Symptoms were evaluated using a previously validated instrument, the—*I’m not making this up*—SNOT-20 measure of symptom severity, including the physical problems, functional limitations and emotional consequences of sinusitis. From an initial average score of 35.5–37.6 of a possible 100 at baseline, SNOT scores dropped approximately twice as much, on average, in the irrigation group. The changes were significantly different at 4 weeks (-7.4 vs. 16.2; $P=0.002$) and at 8 weeks (8.5 vs. 15.0; $P=0.04$) of treatment. A decrease of 16 points is considered to be clinically relevant. By the end of 8 weeks, 61% of patients using the spray reported that symptoms were present “often” or “always” as compared with 40% in the irrigation group ($P=0.02$). Hypertonic saline irrigation also has been shown to be effective for sinusitis (*J Fam Pract.* 2002;51:1049-1055).

REFERENCE

Pynnone MA, Mukerji SS, Kim HM, et al. Nasal saline for chronic sinonasal symptoms. *Arch Otolaryngol Head Neck Surg.* 2007;133(11):1115-1120.

Otitis Media Treatment Does Not Decrease Effusion

Clinical Question

Does antibiotic therapy prevent the development of middle-ear effusion in children with acute otitis media?

Bottom Line

Treating acute otitis media with antibiotics does not decrease the likelihood of the children developing an asymptomatic middle-ear effusion. (LOE = 1a)

Study Design

Meta-analysis (randomized controlled trials)

Funding

Government

Setting

Various (meta-analysis)

Synopsis

The researchers conducting this meta-analysis searched several databases, including the Cochrane Library, to identify randomized trials that compared antibiotic treatment with no antibiotic treatment for acute otitis media and evaluated middle-ear effusion by tympanogram at 1 month. The description of the methods of this study was sparse, probably due more to the reporting limitations of the journal rather than the actual conduct of the study. The researchers identified 5 studies enrolling a total of 1,328 children. For 4 of the studies, they were able to obtain the databases from the researchers, allowing them to perform the meta-analysis on individual patient data rather than combine the end results from each study. Children aged <2 years with recurrent otitis media were more likely to develop effusion. There was no statistically significant effect of antibiotic treatment on the development of middle-ear effusion after 1 month.

REFERENCE

Koopman L, Hoes AW, Glasziou PP, et al. Antibiotic therapy to prevent the development of asymptomatic middle ear effusion in children with acute otitis media. *Arch Otolaryngol Head Neck Surg.* 2008;134(2):128-132.

Extended Antiretroviral Prophylaxis Prevents HIV in Breastfeeding Infants

Clinical Question

What is the optimal strategy to prevent HIV transmission in breastfeeding infants?