



## On Stone Passage, Wait-and-See Prescriptions, Foreign Bodies, and Wireless Prescribing

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Each month, Dr. Nahum Kovalski will review a handful of abstracts from, or relevant to, urgent care practices and practitioners. For the full reports, go to the source cited under each title.

### Medical Therapy to Facilitate Urinary Stone Passage: A Meta-analysis

**Citation:** Hollingsworth JM, Rogers MA, Kaufman SR, et al. *Lancet*. 2006;368:1171-1179.

**URL:** <http://www.thelancet.com/journals/lancet/article/PIIS0140673606694749/abstract>

**Key point:** Medical therapy is an option for facilitation of urinary-stone passage.

Medical therapies to ease urinary-stone passage have been reported, but are not generally used. If effective, such therapies would increase the options for treatment of urinary stones.

The authors searched MEDLINE, Pre-MEDLINE, CINAHL, and EMBASE, as well as scientific meeting abstracts, up to July 2005. All randomized controlled trials in which calcium-channel blockers or  $\alpha$ -blockers were used to treat ureteral stones were eligible for inclusion in the analysis. Data from nine trials (N=693) were pooled. The main outcome was the proportion of patients who passed stones.

Patients given calcium-channel blockers or  $\alpha$ -blockers had a 65% (absolute risk reduction=0.31) greater likelihood of stone passage than those not given such treatment. The pooled risk ratio for  $\alpha$ -blockers was 1:54 and for calcium-channel blockers with steroids 1:90. The proportion of heterogeneity not

explained by chance alone was 28%. The number needed to treat was 4.

**Comment:** The authors note that although a high-quality randomized trial is necessary to confirm its efficacy, these findings suggest that medical therapy is an option for facilitation of urinary-stone passage for patients amenable to conservative management, potentially obviating the need for surgery. ■

### Wait-and-See Prescription (WASP) for the Treatment of Acute Otitis Media: A Randomized Controlled Trial

**Citation:** Spiro DM, Tay KY, Arnold DH, et al. *JAMA*. 2006;296:1235-1241.

**URL:** [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=retrieve&db=pubmed&list\\_uids=16968847&dopt=Abstract](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=retrieve&db=pubmed&list_uids=16968847&dopt=Abstract)

**Key point:** The WASP approach substantially reduced unnecessary use of antibiotics in children with acute otitis media (AOM) seen in an emergency department.



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AOM is the most common diagnosis for which antibiotics are prescribed for children. Previous trials that have evaluated a “wait-and-see prescription” (WASP) for antibiotics, which parents are asked not to fill unless the child either is not better or is worse in 48 hours, have excluded children with severe AOM. None of these trials were conducted in an emergency department.

This was a randomized controlled trial, from July 12, 2004 to



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July 11, 2005, involving children with AOM aged 6 months to 12 years seen in an ER. These children were randomly assigned to receive either a WASP or a standard prescription (SP). Overall, 283 patients were randomized either to the WASP group (n=138) or the SP group (n=145).

Substantially more parents in the WASP group did not fill the antibiotic prescription (62% vs. 13%;  $P<.001$ ). There was no statistically significant difference between the groups in the frequency of subsequent fever, otalgia, or unscheduled visits for medical care.

Within the WASP group, both fever (relative risk [RR], 2.95;  $P<.001$ ) and otalgia (RR, 1.62;  $P<.001$ ) were associated with filling the prescription. ■

### Foreign Body Removal From the External Auditory Canal in a Pediatric Emergency Department

**Citation:** Marin JR, Trainor JL. *Pediatr Emerg Care*. 2006; 22:630-634.

**URL:** [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list\\_uids=16983246&query\\_hl=o&itool=pubmed\\_DocSum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=16983246&query_hl=o&itool=pubmed_DocSum)

**Key point:** Referral to otolaryngology should be considered if more than one attempt or instrument is needed for removal of a foreign body in the ear canal.



Physicians in the authors' pediatric emergency department successfully removed 204 (80%) of 254 foreign bodies. In 30 cases (12%), there was a complication. Multiple attempts at removal were associated with failure (relative risk [RR], 6.0) and complications (RR, 3.1). The use of multiple instruments was also associated with failure (RR, 5.4) and complications (RR, 4.0).

Of the 244 patients in whom emergency department attempts at removal were made, 26 were successfully removed in otolaryngology clinic, and 14 were removed in the operating room.

Foreign bodies present in the canal for more than 24 hours were not at higher risk of failed removal or complications. Patients younger than 4 years also were not at increased risk of having failed removal or complications.

**Comment:** In medicine, proper resource management means filtering out cases that can be handled by the more immediate and readily available ER/urgent care doctor, before referral onto specialty care. Eighty percent of these FBs can be successfully removed by the first-line doctor. And if the first attempt failed, then this group—only 20% of the original—can

be referred on. For those FBs removed in the ENT clinic, one could ask what special equipment made this possible (e.g., suction, finer instruments, magnification). One could then look into duplicating some of these tools (like the suction) in other settings to further increase first-line success. ■

### Wireless Handheld Computers and Voluntary Utilization of Computerized Prescribing Systems in the Emergency Department

**Citation:** Shannon T, Feied C, Smith M, et al. *J Emerg Med*. 2006;31:309-315.

**URL:** <http://www.imesi.org/docs/Azyxxi//Papers/PDA%20prescribing%20-07a%20for%20pdf.pdf>

**Key point:** Physicians are amenable to using wireless handheld computers for prescribing.

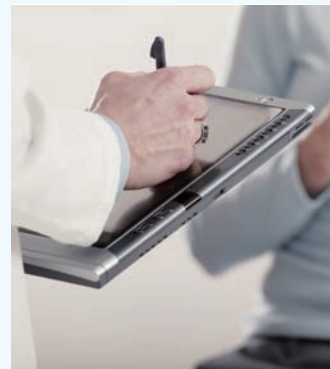
Illegible or invalid handwritten prescriptions can result in avoidable medical errors. Computer-based prescribing can mitigate the problem.

An observational study was performed to examine the effect of wireless handheld computers (handhelds) on voluntary utilization of computerized prescribing within an emergency department. Handhelds with prescription-writing software were provided to physicians and the numbers of hand-written and computer-generated prescriptions were compared before and after the introduction of the handhelds.

The resulting increase in computer-based prescribing was statistically significant and was observed largely among physicians who already used desktop computers for prescribing.

The study concluded that handhelds increased voluntary utilization of computerized prescribing, but that the physicians most likely to use handhelds were those who already used desktop-based prescribing.

**Comment:** The approach that this group adopted is an interesting and successful one. Rather than force the staff to move, altogether, over to the new digital prescribing system, the doctors were allowed to choose which system they preferred. As the years pass, and more and more doctors are young enough to have played with video games as a child, e-prescribing (as well as all forms of digital medical records) will become the de-facto standard. The key to the success of any digital medical system is improved physician productivity which should translate into greater reimbursements, or at least, reduced medicolegal risk. ■



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