
Letters to the Editor

Catheter Irrigation and Long-term Patients

To the Editor:

A most contentious practice of some attending physicians involved in long-term patient care is routine catheter irrigations using 0.25% acetic acid. Compounding the "break" of the closed system is the problem of requests for urine cultures and antibiotic sensitivity tests. What should the approach be to these patients!

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John P. Burke, MD responds to Dr. Silver:

Formal guidelines have not been developed for the management of patients with long-term (more than 30 days) indwelling urethral catheters. However, the same types of catheter systems are used for both short-term and extended periods of catheterization, and the same types of catheter hygiene should be used in order to minimize introducing new organisms. Maintenance of a closed system and avoidance of unnecessary disconnection of the catheter-drainage tube junction should be practiced for all patients. In addition, consideration should be given to recommending the use of gloves by personnel caring for drainage systems (Universal Body Substance Precautions), a technique that may also help to prevent cross-infection with bacterial species such as *Providencia stuartii* and *Morganella morganii*.

Warren has emphasized differing management goals for short-term versus long-term catheters.¹ For example, strategies to postpone and thereby to prevent bacteriuria are relatively more important in patients with a short-term catheter, whereas bacteriuria is nearly universal in patients with a long-term catheter; therefore, prevention of the complications of bacteriuria should be foremost. These two goals are compatible, not mutually exclusive.

The goal of catheter irrigation is to diminish obstruction as a consequence of bacteriuria. However, the efficacy of such irrigation has not been demonstrated in appropriate trials. Indeed, in one randomized, controlled, cross-over trial, daily irrigation with normal saline was not useful in reducing the incidence of obstruction.¹ On the other hand, irrigation does interfere with the closed system and is expected to increase the risks of introducing new organisms. The practical consequences for patients with long-term catheters are unclear because the reality of the clinical situation is that these patients are already bacteriuric.

Routine periodic cultures of urine from short-term catheters have not proven useful. Studies to evaluate the clinical usefulness of culture monitoring of long-term patients have not been done. However, the availability of the results of such cultures may "invite" antibiotic treatment of asymptomatic bacteriuria. Such treatment often fails in the presence of an indwelling catheter and has not been

shown to prevent infectious sequelae such as fever, bacteremia, and acute pyelonephritis. Even if bacteria were eradicated from the urine, bacteriuria will recur if the catheter remains in place; the original bacteria are often replaced by strains resistant to the antibiotics used.¹

Is there a "bottom line"? Well, I believe one can say that, for the moment, both catheter irrigation and systemic antibiotic treatment should be sharply limited to specific clinical circumstances.

REFERENCES

1. Warren JW: Catheter-associated urinary tract infections. *Infect Dis Clin N Amer* 1987; 1:823-854.
2. Alling B, Brandberg A, Seeberg S, et al: Effect of consecutive antibacterial therapy on bacteriuria in hospitalized geriatric patients. *Scand J Infect Dis* 1975; 7:201-207.

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Emergency Endotracheal Intubation

To the Editor:

We would like to comment on the article by Lowy et al entitled "The Incidence of Nosocomial Pneumonia Following Urgent Endotracheal Intubation" (*Infect Control* 8:245-248; 1987). We are concerned that the authors' conclusions may lead to inappropriate