Letters to the Editor

Infected Urine and Prostatectomy Wound Infection

To the Editor:

Richter et al demonstrate a significant association between infected urine and subsequent prostatectomy wound infection, but conclude that preoperative presence of an indwelling catheter did not alter wound infection risk. [1]

An expected significant association between long-duration indwelling catheterization and cumulative incidence of bacteriuria is evident in their table. Bacteriuria is an intermediate step in the causal path between catheterization and wound infection. Relatively small numbers of catheter and catheter-free patients afforded low power to directly detect a statistically significant relationship between catheter status and wound infection. While a three-fold pooled risk ratio was demonstrated for bacteriuria (with a wide confidence interval extending from approximately 1.1 to 8.4), wound infection risk ratios derived from the data might even suggest a protective effect from catheters in the presence of bacteriuria (Figure) .

To investigate this, duration of preoperative catheterization and timing of antimicrobial prophylaxis, among other variables, would have to be controlled. Pending stratified or multivariate analysis of additional observations, it seems prudent to heed Krieger's advice[2] of either avoiding preoperative invasive instrumentation or minimizing the duration of such exposure. Removing biofilm-coated catheters also might hasten sterilizing the urine. Prophylaxis (and therapy of sepsis) also might consider anaerobes.[3]

		Bacteriuria: t	Bacteriuria: –
Catheter	t	2.6	0.9
	–	4.5	1.0

FIGURE. A 2x 2 table comparing the presence of catheters and bacteriuria.

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The author replies.

It has been demonstrated that there is a significant association between long-duration indwelling catheterization and cumulative incidence of bacteria.' In the present study, there was a difference in the incidence of postprostatectomy wound infection among patients with indwelling catheters (19%) when compared with catheter-free patients (12%). Although the number of patients in each group was adequate, the difference was not statistically significant. It is somehow difficult to understand how a catheter may play a protective role in reducing the risk of wound infection in the presence of bacteriuria. There are a number of variables to be controlled for further investigation of the mechanism of postprostatectomy wound infection. We absolutely agree with Krieger's advice; unfortunately, it is not always possible because of medical (patients with acute concurrent diseases and temporary high risk)- or paramedical (waiting list)-related problems.

At least there are some ways to minimize these problems. One can use a special device (intraurethral catheter) instead of an indwelling catheter to give the patient a better quality of life until surgery is performed.[2] One also can try to prevent postoperative bacteriuria and wound infection with the use of preoperative bladder instillations of povidone-iodine.[3]

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