

The Lapidus legacy: 42 years and cathing

Adam P. Klausner, MD

Division of Urology, Virginia Commonwealth University School of Medicine, Richmond, Virginia, USA

Referring to the article published on pp. 7188-7193 in this issue

KLAUSNER AP. The Lapidus legacy: 42 years and cathing. *Can J Urol* 2014;21(2):7194.

We have reached the 42nd anniversary of the landmark paper by Jack Lapidus¹ which introduced the world to the concept of clean intermittent catheterization (CIC). This sentinel work led to a paradigm shift in bladder management for individuals with neurogenic bladder dysfunction and other causes of urinary retention. It is arguable that the introduction of CIC is responsible for reductions in mortality due to renal deterioration in individuals with spinal cord injury and disorders. In addition, CIC has been shown to reduce deleterious effects of chronic indwelling catheters including urinary tract infections (UTIs),² traumatic hypospadias, urinary tract fistulae, urinary calculi, and even bladder cancer.³

Yet, 42 years later, we are still plagued by a persistently high incidence of catheter-associated UTIs (CAUTI) in our institutions and our communities. Industry has tried to improve issues associated with CIC by developing various advances in catheter technologies including antibiotic-coated catheters, hydrophilic catheters, and closed system catheterization kits. However, the data on these advancements for the improvement in both CIC compliance and reduction in CAUTI has been limited.⁴⁻⁶ Likewise, various medical strategies for reduction in CAUTI including antibiotics, methenamine, cranberry compounds, and bacterial interference have not been widely accepted.⁷

We are also aware that many individuals who start off on CIC eventually fail and revert to the use of indwelling catheters due to lack of care-giver support, convenience, or other unknown reasons.⁸ Unfortunately, specific data about who best benefits from CIC and how to improve CIC compliance are sorely lacking. Thus, it is refreshing to read the article by Di Pierdomenico and Radomski in this issue of CJU entitled, "Success rates of patients with poor emptying on clean intermittent catheterization." In this study, the authors examined their retrospective series of more than 300 patients on CIC and used multivariate regressions to show

that CIC failure was associated with factors including diabetes, use of antimuscarinic medications, the need for home care, and post void residual volumes of less than 300 mL.⁹ Although definitive conclusions cannot be drawn from this limited series, the article represents a clear step in the right direction and will hopefully fuel the development of multi-institutional randomized controlled trials to answer some of these important questions and improve outcomes for individuals on CIC. It is only in this way that we can continue to make progress in the management of neurogenic bladder dysfunction and other forms of urinary retention. It is only in this way that we can continue to improve upon the legacy of Lapidus. □

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Address correspondence to Dr. Adam P. Klausner, Division of Urology, Virginia Commonwealth, University School of Medicine, PO Box 980118, Richmond, VA 23298-0118 USA