## INTRODUCTION

"Neurogenic bladder" refers to bladder dysfunction which occurs from a neurologic etiology, such as spinal cord injury, multiple sclerosis, or cerebrovascular accidents. Those with neurogenic bladders may have a variety of different types of bladder dysfunctions ranging from detrusor areflexia to detrusor hyperreflexia. In addition to a neurogenic bladder being a cause for a voiding dysfunction, many people in the rehabilitation setting have other reasons for developing a voiding dysfunction after their disability. These include problems such as urinary tract infections, decreased mobility, stool impaction, pharmacologic agents, and/or changes in cognition or ability to communicate.

Urinary tract infections are common in those with any type of voiding dysfunction. There is, however, controversy with regard to the significance of bacteriuria, the definition of a urinary tract infection, and when to treat bacteriuria. The risks of a clinical infection and complications need to be weighed with those of developing resistant bacteria and the side effects of constantly taking antibiotics. Dr. Marie Gribble has made substantial contributions to the field with her work on quantitative urine cultures and pyuria in those with spinal cord injuries (SCI). Her article discusses the topic of significant bacteriuria and pyuria. Dr. Montgomerie has a wealth of experience in the diagnosis and treatment of urinary tract infections which he shares in his excellent review article. Because of the many varying opinions on evaluation and treatment of urinary tract infections, the National Institute on Disability and Rehabilitation Research (NIDRR) sponsored a consensus conference in 1992, titled "Prevention and Management of Urinary Tract Infections among People with Spinal Cord Injuries." The consensus statement which was developed from this conference is included in this issue. When patients with voiding dysfunctions are being discharged home, an important part of the rehabilitation process is training and education. The understanding that patients and their family members have about their bladder management may make the difference, not only on complications such as penile skin

breakdowns from external condom catheter devices, but also on whether they want to return home or be placed in a nursing home. The majority of teaching in a rehabilitation hospital is done by nurses. Joan Palasz Alverzo, RN and Cecilia Jacalan, RN have given a comprehensive overview on the various nonpharmacologic bladder management options for these individuals. Women's issues regarding bladder management and SCI are often not addressed. Dr. Jackson has written several articles on this subject, and in this issue she discusses the topic of intermittent catheterization as it applies to women. Sphincterotomies are often used to treat spinal cord injured men with sphincter detrusor dyssynergia, particularly if complications are beginning to develop. In the past, sphincterotomies have been technically difficult, due in a large part to the possibility of significant bleeding. Dr. Perkash has the most experience in the country with sphincterotomies. He describes technical advances in performing sphincterotomies using a laser. This is the first published article on a series of patients undergoing laser sphincterotomies. There are few prospective articles describing voiding dysfunctions in patients with neurologic injuries other than SCI. Campagnolo et al. and Linsenmeyer et al. have contributed prospective studies on voiding dysfunctions following head injuries and cerebrovascular accidents, respectively. These articles lay the groundwork for further investigations in these patient populations. Since we have many new areas to investigate in those with voiding dysfunction, the section appropriately ends with a thorough review and research of sacral electrical stimulation for bladder management by Drs. Creasey and Bodner. In the United States, a number of centers are investigating methods to augment voiding through neurostimulation.

It is not uncommon for members of a rehabilitation team to be faced with patients for whom issues arise centered around voiding dysfunctions. I hope you will find these articles helpful as you work with these individuals.

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