

Preface

Pelvic Neuromodulation



Firouz Daneshgari, MD
Guest Editor

In 1863, Giannuzzi stimulated the spinal cord in dogs and concluded that the hypogastric and pelvic nerves are involved in regulation of the bladder. What he set in motion for the next 150 years of testing in the field of neurourology is the concept that nerve stimulation can correct or control the function of pelvic organs. Although Giannuzzi might never have envisioned such methods of “neuromodulation” as stimulation of sacral, obturator, pudendal, or peripheral nerves or insertion of miniature devices or injection of neurotoxins into the bladder—these techniques have been tested and applied in laboratories and clinical settings throughout the world.

However, the recent success and subsequent regulatory approval of a sacral neuromodulation device has energized the field and has created a historic surge in both clinical usage and the research activities related to pelvic neuromodulation. This surge in activities related to neuromodulation has been driven by a very human medical dilemma: the limited therapeutic options available to patients who suffer from pelvic organ diseases—and the pressing need to be more efficient and less invasive in our neuromodulatory approaches.

As in other areas in medicine, we’re looking for those sparks of success that will lead to creative fires of expanding knowledge. But we also need to respect the well-established integrity of our field by being true to our surgeon-scientist tools as we

protect and explore the increasing territory of pelvic neuromodulation. This issue of the *Urologic Clinics of North America* seeks to spotlight our track record of integrity.

It has been a rare privilege for me to lead a group of international experts in producing this first-ever issue of the *Urologic Clinics of North America* dedicated to pelvic neuromodulation, a work that was created with several goals in mind. We wanted to provide the first comprehensive, reader-friendly guide on the topic for practitioners who deal with pelvic floor disorders. We also believe it is important to define what is currently the state-of-the-art in this field. Finally, we hoped to create an investigative platform that will allow us to peer wisely into the future of pelvic neuromodulation.

In this issue, we’ve tried to present you with a panoramic view of pelvic neuromodulation. The articles are organized so that readers with varying degrees of interest can find the information they require. We begin with past historical aspects and conclude with a glance to the future. In between, we offer technical expertise on how to conduct these procedures and detailed information on patient selection and troubleshooting. We travel to Canada and Europe to provide international clinical data, and we pose all the pertinent research questions on the clinically available modalities from sacral to peripheral to insertable devices and injectable agents. Additionally, this

issue provides all the currently available clinical applications of neuromodulation for urinary incontinence, bladder dysfunction, fecal incontinence, and pediatric use.

I am indebted to the authors for their contributions to this comprehensive and updated publication on pelvic neuromodulation, and I applaud their success in completing these articles on a very tight timetable.

It is my sincere hope that this work will inspire additional enthusiasm in the field of neurourology, and that this enthusiasm will be directed toward addressing relevant research questions in pelvic neuromodulation. There is a danger here. Ignoring unexplored issues in this field will create an overhanging cloud that could dampen professional enthusiasm and ultimately limit the potential of this useful therapeutic modality.

So let's continue to fuel our fire of expanding knowledge. I'd like to dedicate this issue to the pioneers in our field who sparked us on this path and to the upcoming generation of surgeon-scientists in the area of pelvic medicine and reconstructive surgery who will furnish the light necessary to lead us to the next level of pelvic neuromodulation.

Firouz Daneshgari, MD
*Director, Center for Female Pelvic Medicine &
Reconstructive Surgery
The Cleveland Clinic Foundation
Glickman Urological Institute
9500 Euclid Avenue A100
Cleveland, OH 44195, USA
E-mail address: daneshf@ccf.org*