Special Issue: Psychophysiological Assessment and Treatment of Pelvic Floor Disorders

The cover of this Spring 2006 issue of Biofeedback represents one focus of pelvic floor biofeedback training—problems with urinary continence. Guest editors Richard A. Sherman and Louise Marks have prepared this special issue to promote wider awareness and utilization of biofeedback treatment protocols for pelvic floor disorders. We are grateful for the time and energy they devoted to this challenging special issue. We are also thankful for the time and energy of the consulting editors: Howard I. Glazer, Olafur S. Palsson, Elise Stettner, and Kathie M. Wells. Pelvic floor disorders include incontinence disorders (both urinary and fecal), pain disorders of the urogenital and anorectal systems, muscle-related constipation, overactive bladder syndrome, irritable bowel syndrome, and other related disorders.

Millions of North Americans suffer with pelvic floor disorders, resulting in mounting medical costs, decreased activity, reduced quality of life, pain, and shame. Hundreds of thousands of men and women of all ages suffer urinary or fecal incontinence resulting in embarrassment and restricted social activity. Many couples suffer loss of sexual relations due to vulvar or prostatic pain disorders. A substantial number of the elderly are placed in assisted living settings prematurely because of incontinence disorders that could be treated with current biofeedback protocols. The present special issue describes research advances, assessment procedures, and treatment protocols offering hope for these individuals.

Some of the earliest practical applications in the field of biofeedback have come in the area of pelvic floor disorders. In 1947 California gynecologist Arnold Kegel invented the perineometer to assist his gynecological patients in controlling urinary leakage. John Perry and Leslie Talcott (1989) point out that the perineometer meets all of the definitions of a biofeedback device, including the 10-point definition of biofeedback proposed by Mark Schwartz (Schwartz et al., 1987). The perineometer is an instrument inserted into the vagina that measures muscle contraction and provides the patient with immediate feedback in order to guide her enhanced control of urine. The use of this device enhances self-regulation and avoids personal embarrassment, social stigma, and costly and often ineffective surgical procedures. Kegel also introduced the now widely used Kegel exercises, but it is noteworthy that the Kegel exercises are more effective when their use is accompanied by perineometric or surface electromyography biofeedback.

The field of incontinence treatment also produced another contender for the earliest biofeedback device. O. Hobart Mowrer, the respected psychological researcher, described the use of a bedwetting alarm in a 1938 article. The simple device detected wetting, sounded an alarm, and awakened the child and parents (Mowrer & Mowrer, 1938). This immediate feedback triggered awakening, reflex sphincter contraction, and detrusor muscle relaxation. Through a process of classical conditioning, the internal cues presented by the filling bladder take over to stimulate the same response sequence (Collins, 1973). Many children rapidly learn to self-monitor and self-regulate. The process becomes automatic for most children, to the extent that they sleep through the night without incident.

These early innovations in daytime and nighttime incontinence treatment have borne fruit with dramatic personal consequences for many individuals. The U.S. Agency for Health Care Policy and Research published practice guidelines for adult urinary incontinence in 1992, recommending biofeedback as the first choice of treatment (Whitehead, 1995). Research reports show a similar efficacy for biofeedback with fecal incontinence (Whitehead & Drossman, 1996). These procedures produce a tremendous boon in personal esteem because the individual can once again lead an active life without shame or fear.

The recent book on evidence-based practice in biofeedback and neurofeedback by Yucha and Gilbert (2004) rates the efficacy of biofeedback for urinary incontinence at level five (efficacious and specific) for females and level four (efficacious) for males. They also rated the treatment of vulvar vestibulitis and fecal elimination disorders at level three (probably efficacious). A recent white paper by Palsson, Heymen, and Whitehead (2004) rated treatment for pelvic floor disorders similarly, with a rating of biofeedback for anorectal pain disorders as level two (possibly effi-
cacious). Many of these efficacy ratings might be even higher, but there is a need for larger and better designed research studies, for example on anorectal pain. The Biofeedback Certification Institute of America (BCIA) also has a new specialized certification for the biofeedback of pelvic floor disorders. Yet many communities in North America have no adequately trained practitioners providing biofeedback treatment for pelvic floor disorders.

Professional Issues
Sebastian Striefel discusses a number of professional issues relevant to the behavioral and biofeedback treatment of pelvic floor disorders, especially the critical questions of “scope of practice,” competence, and standards of care. In addition, Tamara Dickinson overviews the new BCIA certification program for the treatment of pelvic floor disorders and the certification requirements.

Special Issue Articles
Richard Sherman introduces the special issue, providing an overview of current practices in psychophysiological assessment and treatment for common pelvic floor problems.

Howard Glazer introduces a well-documented treatment protocol for the treatment of vulvar pain disorders and reviews recent research on the treatment of vulvar pain as well as parallel research on prostatodynia.

Tamara Dickinson reviews current practices in functional bladder testing. Urodynamic assessment examines a variety of aspects of bladder function, including bladder storage volume, voiding volume, flow rate, and postvoiding symptoms. She describes the urological testing used in urodynamic assessment, along with the role of surface electromyography.

Olafur Palsson and Steve Heymen review the current research and clinical protocols for treating anorectal disorders, including functional fecal incontinence, pelvic floor dyssynergia, and functional anorectal pain. Their review provides strong support for the effectiveness of biofeedback treatment in this area.

David McGee provides a helpful and thorough overview of the biomedical instrumentation and protocols involved in the physiological evaluation of anorectal function. His review identifies instrumentation that is also used in the biofeedback training of anorectal disorders.

Richard Sherman discusses the surprisingly common problem of urinary incontinence in healthy young women. He overviews effective biofeedback treatments developed for young women in military settings.

Association News and Events
The News and Events section includes columns from AAPB’s President Richard Sherman, President-Elect Richard Gevirtz, and Executive Director Francine Butler.

References


