

## **Welcome to the first edition of Pelviperineology for 2009**

*March 2009 marks an important step in the development of this journal. We are pleased to announce a significant expansion of our editorial board with new contributors from the various specialties, reflecting our multidisciplinary nature. With our new editorial board the journal will have the resources to have regular contributions in the fields of Imaging, Anatomy, the Integral Theory as well as existing features of the European Perineology Group and the Pelvic Floor Digest.*

*The Journal now begins the next phase of our development striving to achieve Medline listing and start to develop an impact factor. Our new board is committed to developing the Journal as the preeminent multidisciplinary journal in the world. We are looking for people who wish to make a commitment to this process and willing to help us by submitting quality articles for publication, helping to review articles and generally make their colleagues aware of what the journal has to offer.*

*This year the AAVIS International Pelviperineology Congress will be held in Noosa on the Sunshine Coast of Queensland in conjunction with the International Pelvic Floor Dysfunction Society and the International Collaboration of the Pelvic Floor. This year the Urological Society and the Colorectal Society of Australasia have also been invited to participate. We are anticipating a good representation of all three pelvic floor specialties. There will be a special emphasis on colorectal dysfunction and treatment of posterior compartment defects. The multidisciplinary faculty and preliminary program can be reviewed by visiting the AAVIS Website at [www.aavis.org](http://www.aavis.org)*

THE EDITORS

## **Can pelvic floor ultrasonography “imagine” the future?**

Pelvic floor disorders (PFD) include urinary and fecal incontinence, overactive bladder, constipation, pelvic pain and pelvic organ prolapse. These conditions are often assumed to be attributable to the effects of pregnancy and childbirth. It is still questionable whether pregnancy itself is a risk factor for PFD in later life or if it is the vaginal delivery that is the main risk factor. Pelvic floor laxity as a consequence of childbirth may result from weakening and stretching of the muscles and connective tissue during delivery or it may occur as result of spontaneous lacerations and episiotomies during delivery. Both can lead to impairment of the position and support of the pelvic organs. Damage to the levator muscle complex, that provides support to the lower urinary tract, reproductive tract and lower gastrointestinal tract, will result in impaired function of any, or all, of the structures that the muscles support. In addition, lack of integrity of connective tissue (as endopelvic fascia, uterosacral, coronal and pubourethral ligaments) that supports the three organ systems will lead to herniation of one organ system into another. Frequently damage occurs after the first delivery, however it may remain occult and patients may not become symptomatic until later in life or following subsequent vaginal deliveries.

There is a great need to increase our understanding of the natural history of pelvic floor dysfunction. An important issue is: can we detect occult pelvic floor damage and predict which damage can predispose and progress to PFD in certain women?

During the past decade, pelvic floor imaging techniques have become increasingly popular as diagnostic tools in the management of patients with PFD. Magnetic resonance imaging offers clear images of the entire pelvis, however MRI is expensive and with current technology is time-consuming. Ultrasonography also provides detail of the pelvic floor region. This modality is rapid, less costly, portable, and accurate. Recently introduced high frequency ultrasound transducers with a built-in 3D automated acquisition system can be successfully applied to improve our knowledge of the pelvic floor. Three-dimensional endovaginal, endoanal and translabial ultrasound provides a good visualization of anatomy and morphology of the pelvic organs, muscles with their attachments, soft tissues and vessels in several planes never obtained before. In addition dynamic ultrasonography provides information on the function of the three compartments. Levator ani or endopelvic fascia damages, which occur during the vaginal birth process, can be determined with the use of pelvic floor ultrasonography.

The goal is to use pelvic floor ultrasonography to identify the causative mechanism of PFD and its risk factors, and finally propose treatment. Using US assessment it may be possible “to imagine” the future and predict outcomes. Thus pelvic floor US can be performed after vaginal delivery to determine pelvic floor damages that are at risk for development of PFD in order to provide patients information regarding potential consequences of PFD and allowing patients to make a decision whether they wish undergo an elective caesarean delivery.

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