

An Interview with Prof. Philippe Zimmern on Common Problems of Female Pelvic Medicine and Reconstructive Surgery

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Philippe Zimmern, M.D., is a Professor of Urology at UT Southwestern Medical Center and Director of the Bladder and Incontinence Treatment Center. His common practice includes incontinence, prolapse, voiding dysfunction, urodynamics, urinary tract infections, fistulas, and neurourology. He also specializes in vaginal surgery, including minimally invasive robotic surgery for prolapse. Dr. Zimmern completed his medical training at the Necker-Enfants Malades Hospital in Paris, France. He has completed his urology residency in France and spent a fellowship year at University of California Los Angeles (UCLA) with Dr Shlomo Raz.

He is a past President of the Society for Urodynamics and Female Urology (SUFU) and in 2011 was the recipient of the SUFU Distinguished Service Award. In 2012, he received the prestigious Continence Care Champion award from the National Association for Continence (NAFC).



He has been a visiting professor in the United States, Europe, China, Australia, and Canada and has editorial and advisory responsibilities for urology journals in France and the United States. He has co-authored more than 226 publications and 57 book chapters and co-edited three textbooks, including the book Female Pelvic Reconstructive Surgery.

BC: Dr. Zimmern could you tell us about your daily practice? What are the common diagnoses of your patients?

PZ: My daily practice in a tertiary care center at a University setting includes a large variety of Female Pelvic Medicine and Reconstructive Surgery (FPMRS) pathologies, including recurrent urinary incontinence, pelvic organ prolapse (new or failures of prior repairs), complications from synthetic materials (vaginal meshes for prolapse and sub-urethral slings for stress urinary incontinence), fistulae, large urethral diverticulum, voiding dysfunction, urodynamic testing, and recurrent urinary tract infections. I am assisted by physician assistants and two fellows specializing in FPMRS conditions, and I also benefit from the help of two outstanding and fellowship-trained faculty colleagues, Dr. Gary Lemack and Dr. Maude Carmel.

BC: Mesh related complaints after prolapse repair are causing serious problems for patients and also for physicians in the USA. What do you advise for Turkish Urologists?

PZ: Synthetic materials can cause complications after their transvaginal insertion for incontinence and/or prolapse, giving birth to a new field in FPMRS termed “meshology” (1). Turkish urologists embarking in these procedures should be fully aware of the current concerns in the USA as outlined by two FDA notifications in 2008 and 2011 (2,3) and a specific set of recommendations for women seeking synthetic sling for treatment of stress urinary incontinence (4,5). They should be mindful that long-term data is still relatively scant for many of these procedures. They should also be prepared to cover a range of questions from their patients who may have found intriguing reports on the Internet. In turn, patients should at the very least understand the immediate and long-term risks of the product(s) offered by their treating physician to treat their condition(s), establish that their treating physician has received appropriate training for performing the proposed procedure(s) which, for some, can provoke serious and possibly irreversible complications, (6) and understand all alternative therapies (including procedures that will not use synthetic material).

BC: In case of pain due to previous mesh placement how often mesh removal is effective for relief of pain?

PZ: Pain following synthetic material placement is a very difficult condition to treat because the source of the pain is not always clearly understood (improper placement, excessive tensioning, retraction during healing, muscle or nerve damage, low grade infection ...). Many patients adamantly request their synthetic material to be removed with the hope that the pain will be relieved. Since there is no accurate imaging studies that can outline the whole course of the mesh once it has fibrosed inside the pelvic structures, it is never possible to promise a patient that the whole material will be removed. However, it has been our experience that about two-thirds of women operated for pain only can achieve pain relief after mesh material removal in a specialized center (7). Among the suburethral slings, it is nearly impossible to remove completely a transobturator tape without an additional translabial approach, whereas the tension-free vaginal tape (TVT) and SPARC slings can be excised completely using a vaginal approach or a combined (or sequential) vaginal/retropubic approach. Likewise, several miniarc slings can be removed transvaginally with their lateral anchors into the pelvic musculature. For those who remain in pain after mesh or sling material removal, the options are unfortunately limited and this may have dramatic implications

for the remainder of their lifetime as illustrated by recent large lawsuit settlement amounts for some.

BC: Do patients experience recurrence of prolapse after mesh removal?

PZ: Many patients worry that once the mesh material placed to originally correct their pelvic organ prolapse has been removed, their prolapse will return. They often expect a combined procedure, namely a removal procedure on one hand followed by some additional repairs on the other hand, using some non-mesh material preferably. Our approach has been to remove as much mesh material as safely possible, which beneath the bladder base, trigone, and ureters is not without risk, and likewise for mesh laid across the rectal wall. Our long-term observation (8) has been that with mesh removal only, there is a small recurrence rate for which very few surgical options remain available. Based on this limited experience, it seems that scar formation replaces the site where the mesh was removed from. One variable is the severity of the prolapse at the beginning before the mesh was inserted. In my experience, this is not typically well-documented in the patient’s charts (POP-Q measurements, standing cystogram, or pelvic MRI). Furthermore, some women who have undergone a mesh placement and then a mesh removal may be less inclined to desire a third surgery, which may explain the relatively low rate of re-operation.

BC: Could you tell about your technique for “anterior vaginal wall prolapse”?

PZ: The procedure called anterior vaginal wall suspension is a simple native tissue vaginal technique whose goal is to reposition the detached anterior vaginal plate to a flat well-supported location, from the bladder neck level to the upper vagina. The primary indication is in a woman with stress urinary incontinence (SUI) secondary to urethral hypermobility with an element of lateral pelvic floor detachment as evidenced by an early grade cystocele. The procedure can be successful in more advanced anterior compartment prolapses but may have to be done in conjunction with an apical repair procedure and/or a posterior compartment prolapse repair as well. Several articles and presentations, as well as surgical videos have been devoted to the steps of the procedure and its outcomes (9-14).

BC: I know that you never placed a mid-urethral sling to any of your patients. What should be the best treatment

options for patients presenting with stress urinary incontinence?

PZ: Yes, I have not placed a synthetic sling in any of my patients. Most women who present with simple SUI due to urethral hypermobility can be improved or made dry without inducing voiding dysfunction by some form of bladder neck suspension procedure. The traditional approach was the Burch suspension, and the anterior vaginal wall suspension is the vaginal counterpart of this retropubic technique, providing the added advantage of bladder base support to avoid secondary kinking at the urethro-vesical junction. For those with bothersome SUI but a well-supported urethra who leak from true intrinsic sphincteric deficiency, the options of treatment include a reinforcement of their intrinsic sphincteric mechanism passively with a bulking agent, or an autologous pubovaginal sling, and rarely an artificial urinary sphincter. The decision is multifactorial based on SUI severity, patient age, comorbidities, voiding function assessed by urodynamic testing, concern for secondary retention, ability to perform CIC, etc...I tend to prefer a bulking agent first with the option of a fascial sling (rectus fascia or fascia lata) as a last resort. And even when I perform an autologous sling, I prefer on placing it loosely to avoid retention, UTI's, UUI etc...

BC: Are single incision mid urethral slings safe? Do they have minimal complications when compared to conventional types of mid urethral slings?

PZ: A recent series on minisling complications outlined that these perceived minimally invasive slings can have the same types of complications than the conventional slings. Their lateral anchor into the pelvic musculature is not easy to control in regards to depth of penetration, symmetry and tensioning. They do cause pain with intercourse, pelvic pain, and can also be obstructive as this series demonstrates (15). Long term data is not available yet; so caution is necessary.

BC: What is the role for urethral bulking agents in the treatment of stress urinary incontinence? Do we have the ideal bulking agent yet?

PZ: In regards to bulking agents, there is no ideal candidate yet. There is ongoing research with reinjecting human cells but the jury is still out on the ability of these cells to serve as more than a bulking agent. I have used Con-

tigen (collagen) for over a decade until April 2011 when it was no longer available in the US. I have switched to Macroplastique™ (Uroplasty, Inc.) based on several reports indicating safety and relative durability. One drawback is that it is not easy to inject in the office. I do my injections under light anesthesia in an outpatient surgery center. There is no pain afterwards and patients resume a normal lifestyle immediately. Like Collagen, Macroplastique™ is very easy to identify with 3 D Ultrasound using a small transvaginal finger probe. This simple objective technology allows to document the volume and configuration of Macroplastique™ around the urethra, and can aid in the decision for reinjection (site and volume). Long-term data for Collagen has been published confirming its relative stability over time (16) whereas for Macroplastique the data is still being acquired but appears promising (17).

BC: What kind of measures should physicians use when defining success in treatment of stress urinary incontinence?

PZ: There is no accepted definition of success for SUI. One extreme is to use five criteria like those used for the SISTER trial (18). But for a busy clinician, this will never be implementable. Another approach is to use a simple validated questionnaire with a few score choices like the short form of the UroGenital Distress Inventory (UDI-6) (19). A satisfaction index or Qol score (0 perfect to 10 terrible) is certainly useful as it expresses the quality of life of a patient who was once bothered by SUI and is presumably better or cured. Questionnaires allow patients to voice their opinion rather than relying purely on physician's interpretation which is often times overly optimistic (20). Beyond dryness, success also means that this anti-SUI procedure created no new problems like pain, dyspareunia, voiding dysfunction, incomplete emptying leading to recurrent UTIs, or worsening urge incontinence. A simple uroflow followed by a bladder scan can be useful post-operatively especially if it can be compared with a pre-operative baseline study. Many physicians do fill their patient's bladder pre-operatively to document SUI (which is a "must do" documentation before considering corrective surgery); and so it is common for them to have a flow/PVR available pre-operatively since they can send their patients to void once their stress test has been completed.

After synthetic sling removal, success outcomes are lacking. One can analyze each symptom individually or challenge themselves to use a composite outcome

that goes beyond the point of success/dry to include several patient self-reported domains such as sexual activity (if active beforehand), lack of pain, and no need for additional therapy (15). One of the critical issues regarding meta-analyses of published articles in our contemporary literature is the lack of uniformity in reporting our outcome measures after SUI corrective procedures. There are over 40 questionnaires available at present and they all differ. It would greatly help our field of FPMRS move forward if we could all agree on a minimum set of outcome measures (21,22) that all articles should provide for comparison sake, leaving complete freedom to the authors to add results from any other outcome tools they favor at their institution or in their own country.

BC: Finally, how surgeons should be trained in the field of “female pelvic medicine and reconstructive surgery”?

PZ: Training in FPMRS is currently done in the US via ACGME-approved 2 year fellowship programs for Urologists and 3 year programs for Urogynecologists. At the completion of these programs, there is a certification process which allows each trainee to be recognized for his/her expertise. Training has to be hands-on like for pilots or electricians, especially when newer procedures come on the market after the training phase has been completed several years ago. It is difficult, some would say nearly impossible, to learn by watching a video or observing in the operating room a skilled surgeon perform a new procedure. Patients should be told about their surgeon’s experience with newer procedures as the majority of them is interested to know this information beforehand (23).

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