

Editorial

Understanding the Concept of *Perineology*

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The name *Perineology* is a neologism which means the study of the perineum. It has been used for the first time in Italy [1]. To understand how this name is becoming a concept, we have to remember some relevant steps of its story.

In the beginning, there was gynecology and urology: both disciplines studying – often independently and separately – the functioning of the pelvic organs and the pelvic floor.

The foundation of the ICS (International Continence Society) in 1970 was the first step to a multidisciplinary approach. The introduction of new and more advanced investigational techniques increased our interest in an understanding of the dynamic interaction between lower urinary tract and the pelvic floor.

In 1975 some prominent gynecologists realized that the clinical aspects of urogenital problems in the female and their impact on the quality of life demanded specific knowledge and specialized training which led to the foundation of IUGA.

In 1990 the *International Urogynaecology Journal* appeared. With time many urogynecologists understood the importance to look at other aspects of the female perineum, like sexual and ano-rectal dysfunctions. The name of the Journal changed to *International Urogynaecology Journal and pelvic floor dysfunction* in 1996.

During the last two decades basic anatomic studies about the pelvic fascia, the pudendal nerve and the levator ani muscles have been done. It was the come back of a more anatomical approach of the perineum which was occulted by urodynamics for many years. At least gynecologist, urologist, coloproctologist, physiotherapist and electrophysiologist were into the same room to discuss about the perineum as a whole.

The *first step in the concept of Perineology is to speak the same language*. For example, an urologist has to understand what is a descending perineum syndrome, a

coloproctologist what is the ‘hammock hypothesis’, a gynecologist what is the pudendal nerve and so on. Training and standardization are necessary.

The *second step of the concept is to introduce a holistic approach of the woman* including the abdominal wall, the psychology, the spinal cord, the behavior ... We want to help a woman, not to treat an isolated perineum.

The *third step is to understand the different defects* involved in perineal dysfunction: anterior and posterior part of the pelvic fascia, suburethral hammock, levator plate, pudendal neuropathy ... Each defect must be treated to obtain a restoration *ad integrum* of the anatomy. In such an approach, the place for the typical suspensions is very small.

The *fourth step is to search and then to modify treatments which are efficient for only one axis but bad for the others*. Example: ‘Should Burch colposuspension still be performed?’ [2] was, for the urogynecologist, a paper, which emphasized the detrimental role of this worldwide used operation on the ano-rectal axis (constipation, rectocele, enterocele and even anal incontinence can occur after a Burch). Other procedures also could be reviewed under the perineological scope, for example, anterior levator myorraphy which probably increases dyschesia.

In the perineologic approach *each organic problem should be treated by its specialist*. For example, a bladder stone must be treated by the urologist; an uterine fibrome by the gynecologist and an anal cancer by the colo-proctologist surgeon.

Our definition of *perineology* (understanding the equilibrium of the perineum and preserving or restoring it) is summarized below.

1. Perineology is a *three axis approach*: urological (urinary incontinence, dysuria), gynecological (prolapse, sexual troubles) and colo-proctological (anal incontinence, dyschesia).

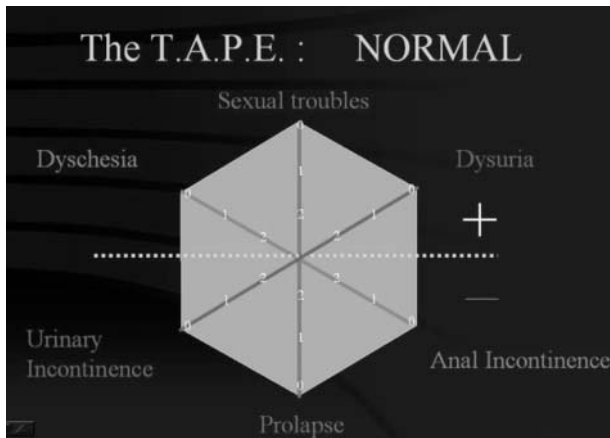


Fig. 1a: Normal TAPE (Three Axis Perineal Evaluation). This patient has no functional perineal trouble (quotation 0 at the end of the 3 axis).

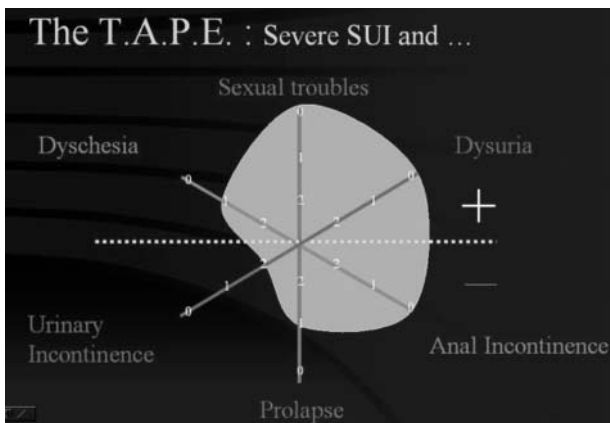


Fig. 1b: Example of a T.A.P.E. before a classical anterior colposuspension for a severe genuine stress urinary incontinence (incontinence quotation 2). The patient has also a rectocele, inducing mild trouble by itself (prolapse quotation 1) but with dyschesia (dyschesia quotation 1).

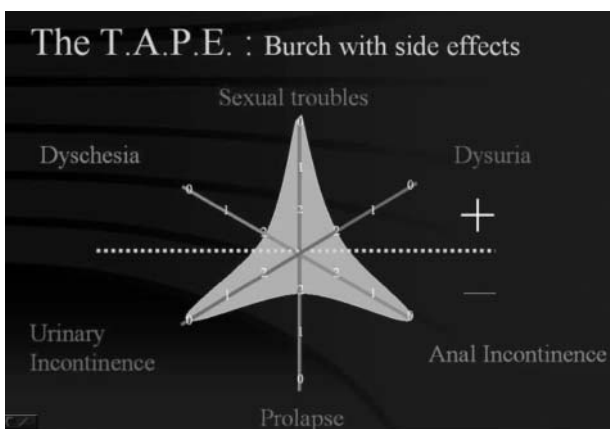


Fig. 1c: The T.A.P.E. in the same patient as Fig. 1b after the colposuspension. After this very high colposuspension, urinary incontinence is cured (incontinence quotation 0) but with a severe dysuria (dysuria quotation 2). The rectocele has increased (prolapse quotation 2) inducing a very severe dyschesia (dyschesia quotation 2).

2. *Perineology* is a holistic approach of the woman: treat a woman not an isolated perineum.
3. The aim of *Perineology* is to restore *ad integrum the anatomy*: correction of each defect in the respect of biomechanics and physiology.
4. *Perineology* is an interdisciplinary approach: everybody has to speak the same language.
5. *Perineology* deals only with the functional disorders (including pain) of the perineum.

To put together all the specialists of the perineum around the woman is already a relevant idea but in this multidisciplinary approach each of the participants is only thinking on his level and nobody has a global vision.

If the principles of *perineology* could be widely accepted by the different surgeons of the perineum, maybe the concept could become a real sub-speciality in the future [3,4,5,6]. From now on, this concept will probably help us to have a better surgical approach.

The dilemma for the future is to choose if the 3 specialists of the perineum will work together with a common approach (*perineology*), or if a new specialist of the perineum (the perineologist) will deal alone with the three axis. New speciality or new specialist?

To help us to get a *three axis approach*, we have created a diagram, the T.A.P.E. (Three Axis Perineal Evaluation) [7,8], designed to summarize the functional state of an individual's perineum (subjective approach). Under normal circumstances, it is hexagonally shaped (Fig. 1a, b et c). It takes into account the 6 standard perineal disorders presented in 3 axis with an excess and a failure end for each:

- the gynecological axis: excess end = dyspareunia
failure end = prolapse
- the urological axis : excess end = dysuria
failure end = urinary incontinence
- the colo-proctological axis: excess end = dyschesia
failure end = anal incontinence

If every surgeon (gynecologist, urologist, colo-proctologist) called on to manage a perineal functional disorder could remember the T.A.P.E. and take it into account when examining her patient before and after surgery, many iatrogenic dramas could be avoided.

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