## The pelvic floor - sexual and medical co-morbidities

## Alessandra Graziottin MD

Director, Center of Gynecology and Medical Sexology H.San Raffaele Resnati, Milan, Italy Co-Director, Post-graduate Course of Sexual Medicine University of Florence, Italy

The pelvic floor is the anatomic, static and dynamic structure that inferiorly closes the pelvis and sustains the pelvic and abdominal organs. Its role is increasingly recognized in the etiology of different medical (urologic, gynecologic, proctologic, physiatric) and sexual conditions, contributing to a significant comorbidity [1].

The role of the pelvic floor overlaps with other biological factors. Embriologic affinity, anatomic contiguity, hormonal sensitivity, vulnerability to reproductive, coitus-related and iatrogenic and/or traumatic events [2], further contribute to the frequent and yet neglected co-morbidity between Urinary Incontinence (UI), Lower Urinary Tract Symptoms (LUTS) and Female Sexual Dysfunctions (FSD), specifically genital arousal disorders [3], dyspareunia and orgasmic difficulties [4]. New reading of clinical data indicate that a significant (and yet neglected) co-morbidity is also present with proctological and bowel diseases [5].

Latent classes analysis of sexual dysfunctions by risk factors in women indicate that *urinary tract symptoms* have a RR = 4.02 (2.75-5.89) of being associated with arousal disorders (and its most frequently reported associated symptom: vaginal dryness) and a RR=7.61 (4.06-14.26) of being associated with sexual pain disorders [6].

The presentation will discuss this co-morbidity in the lifespan perspective, with special focus on predisposing, precipitating and maintaining factors -biological, psychosexual and context-related- the clinician should pay attention to, for a comprehensive diagnosis and a well tailored etiologically oriented treatment [7].

The Overactive Bladder (OAB) is a frequent but underreported condition, affecting from 11.4% to 17% of women over 40 year. Fear of rejection, shame, embarrassment, loss of self-esteem, all contribute to the difficulty the woman has in reporting to her own physician and asking for help.

Active investigation on the part of the clinician (physician and nurses) is key to avoid the "collusion of silence" that involves in a common denial both bladder and sexual problems. OAB is a taboo for many patients, as it conveys the fear and the threat of social rejection. Incontinence violates the social request of control, on mental impulses and on basic functions, like micturition, that is expected to be postponed to time and places socially appropriated.

Emotional and sexual intimacy may be crippled by OAB: sexual identity, sexual function and sexual relationship may all change for worse. Up to two thirds of affected women report to be less confident in courting and less willing to start a new history; one third prefers not to reach orgasm for fear of leaking when pleasure peaks. More than half the women affected by OAB report their feeling less feminine and less sexually attractive: the smell of urine instead of the "scent of woman" is difficult to be accepted by both men and women. "Feeling wet" not because one is aroused, but because of urinary leakage, may block every possibility of intimacy. Sexual co-morbidity is frequent. Dissatisfaction and avoidance of intimacy may be the conclusion of a repeatedly disappointing experience.

The criteria for the differential diagnosis between female ejaculation at orgasm and OAB associated leaking at orgasm will be presented, as they are increasingly relevant in the clinician's practice [4]

Stress incontinence and its gynecological and sexual co-morbidities will be briefly discussed.

Post-coital cystitis is more frequent in hypoestrogenic conditions (hypothalamic amenorrhea, post-partum amenorrhea, menopause) when the vaginal pH increases; when the pelvic floor is hyperactive; when genital arousal is poor or absent; when irritable bowels symptoms are complained of; when systemic antibiotics have altered the colonic and vaginal ecosystems. Current observational data indicate that 40 to 61 % of women with recurrent cystitis do report dyspareunia when actively asked for this co-morbidity [8].



Special focus will be devoted to: 1) the rationale of assessing the vaginal pH, with the implicit evaluation of both the local ecosystems and the estrogenic tissue level in the vagina, and advantages in term of co-treatment of both sexual symptoms and LUTS when topical vaginal treatments are prescribed after the menopause; 2) the importance of assessing the pelvic floor tonus [1], and the rationale of relaxing the hyperactive pelvic floor in recurrent cystitis, dyspareunia and associated conditions, such as dyspareunia [9], vulvodynia [10], and obstructive constipation [1, 5]. A rich series of vulvar pictures will be presented to ease the learning.

Available treatment outcomes will be presented in detail.

The ultimate goal is to stress the logic of progressing from a well assessed medical and sexual *co-morbidity* to a woman-centered, cost and QoL saving *co-treatment*, with a comprehensive and yet easy to practice approach.

## References

- [1] Bourcier A. McGuire E. Abrams P. 2004 Pelvic Floor Disorders Elsevier Saunders, Philadelphia
- [2] Graziottin A. (Chair), Alexander L.J, Banner L, Dennerstein L, Whipple B. Female Sexual Disorders section. In: Porst H & Buvat J (Eds), ISSM (International Society of Sexual Medicine) Standard Committee Book, Standard practice in Sexual medicine, Oxford, UK: Blackwell, 2006; 287-375
- [3] Giraldi A. Graziottin A. Sexual arousal disorders in: Porst H & Buvat J.(Eds), ISSM (International Society of Sexual medicine) Standard Committee Book - Standard practice in Sexual medicine, Blackwell, Oxford, UK, 2006
- [4] Whipple B. Graziottin A. Orgasmic disorders in: Porst H et Al. (Eds), ISSM (International Society of Sexual medicine) Standard Committee Book - Standard practice in Sexual medicine, Blackwell, Oxford, UK, 2006
- [5] Wesselmann U, Burnett AL, Heinberg LJ The urogenital and rectal pain syndromes (Review) (282 refs). Pain 1997; 73(3): 269-94
- [6] Laumann EO, Paik A. Rosen RC. Sexual dysfunction in the United States. Prevalence and predictors, JAMA 1999; 281, 537-544
- [7] Graziottin A. Leiblum S.R. Biological and Psychosocial Etiology of Female Sexual Dysfunction During the Menopausal Transition The Journal of Sexual Medicine 2005; 2 (suppl. 3): 134-146
- [8] Salonia A, Zanni G, Nappi RE, Briganti A, Deho F, Fabbri F, Colombo R, Guazzoni G, Di Girolamo V, Rigatti P, Montorsi F. Sexual dysfunction is common in women with lower urinary tract symptoms and urinary incontinence: results of a cross-sectional study. Eur Urol. 2004; 45(5): 642-8
- [9] Graziottin A. Sexual pain disorders: dyspareunia and vaginismus in: Porst H & Buvat J. (Eds), ISSM (International Society of Sexual medicine) Standard Committee Book - Standard practice in Sexual medicine, Blackwell, Oxford, UK, 2006
- Bachmann GA.et Al. Vulvodynia: a state-of-the-art consensus on definitions, diagnosis and management J Reprod Med. 2006 Jun; 51(6): 447-456