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EVALUATION OF ANDROGENIC SUPPLEMENTATION THERAPY ON PELVIC FLOOR ACTIVITY IN NORMAL POSTMENOPAUSAL WOMEN.

Hypothesis / aims of study

Urinary incontinence and pelvic-floor disorders are major health problems for women. Muscles of the pelvic floor and lower urinary tract are involved in the support of pelvic
organs and micturition.
Recently, an emerging interest in the use of androgen supplementation in women has developed because a recent observations have shown that androgens may potentially play an important role in the pelvic-floor , particularly levator ani and urethral sphincter because sensitive to androgens.
Aims of the study is to verify the efficacy of a androgen supplementation, on pelvic floor muscles and lower urinary tract, in postmenopausal women.
This part of study regard women with no incontinence neither genital prolapse. We retained this a best method for evaluation of increase in pelvic floor activity

Study design, materials and methods

15 volunteers women (mean age 53 ,mean parity 2.9,mean postmenopausal period 4.8 year), were selected from a women postmenopausal population ,who referred at our clinic for postmenopausal bothersome with a last menstrual period almost 3 years ago and no hormonal supplementation therapy . All women provided a standard urogynaecological history, and underwent a clinical examination that include a neurologic examen, inspection of pelvic floor and vaginal examination for POP-QS ,Q-tip swab test, supine and standing stress test and full urodynamic tests including uroflwometry and postvoid residual urine to confirm the absence of urinary and anal incontinence and genital prolapse. Exclusion criteria were urgency, anterior urogynecologic surgery, active urine or vaginal infection, breast cancer and other gynaecological malignancy,any vascular and liver disease, any other diseases that may interfer with pelvic floor contractility.All women gave written consent to participate in the study, which was approved by the Ethics Committee of our hospital.
All women received Prasterone Enantato200 mg+ Estradiolo valerato 4mg , 1 injection montly for six months.
The study of pelvic floor contractility was made with a perineometer . This consisted of a pneumatic resistance chamber (vaginal probe) and a tube that connect a chamber to the manometer with a graduate scale from 0 to 100 mmHg; with the probe in the vagina, the woman contract the pelvic floor and the intravaginal pressure were recorded on the display of manometer .The perineometry was carryed at the start and at the end of therapy. The mean value of 5 continuos contraction of pelvic floor was recorded at the start and the end of test for single woman. T-student test was applied for statistical analysis.

Results

All women showed an increase of pelvic floor contractility (see table 1) at the end of study . T student test was significantly positive ($P<.05$)

Interpretation of results

These data confirm the presence of androgen receptors in the female pelvic floor and lower urinary tract. The anabolic effects of androgen on the urethral sphincter and pelvic floor
muscles may, therefore, provide a therapeutic option in women with stress urinary incontinence(3)

Concluding message

The vagina does not contain a uniform pressure zone because there is no only a one real sphincter but we thinks that the unit of pelvic floor muscles that generate high pressure zone in the vagina are a significant importance, for our study , because show a significative increse of contraction after therapy.
Our results suggested that androgens may play an important role in pelvic-floor and lower-urinary-tract function but we do not know the exact role of androgens in these systems and further investigations are needed.

PRE	POST
35	57
48	72
61	79
60	86

44	76
43	59
61	87
50	70
39	58
44	65
37	58
49	76
45	65
28	56
37	57

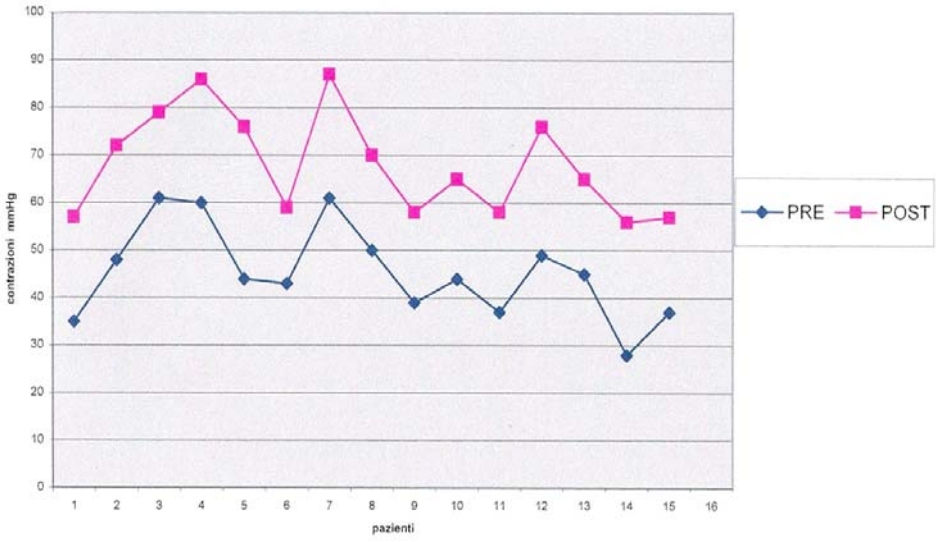

Table and Foto1: **Mean value (mmHg) of 5 consequent pelvic floor contractions recorded, with a perineometer, in 15 volunteers postmenopausal women pre and post six months of androgenic supplementation therapy.**

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