

PELVIC POSTURE IN WOMEN WITH STRESS URINARY INCONTINENCE (PRELIMINARY RESULTS)

Hypothesis / aims of study

An appropriate posture of the lumbar-pelvic segment can influence the activation of muscles of the pelvic floor, making a contributing factor to continence, it favors this pressure is also transmitted to the bladder and proximal urethra, thereby maintaining the peak urethral pressure than bladder. (1,2,3) The aim of this study: Describe the pelvic posture and muscular strength of the pelvic floor muscles in women with Stress Urinary Incontinence

Study design, materials and methods

This is a cross-sectional study. Women were included with aged 18 to 59 years diagnosed with stress urinary incontinence and women excluded with neurological diseases, rheumatic, congenital skeletal muscle disorders, use of prostheses or orthoses, pregnant women, obese and / or have undergone orthopedic surgery. Initially, the patient was instructed to perform the pad test 1 hour (ICS) to quantify in grams urinary loss. In a private room, the anatomical points were marked: anterior superior iliac spine (ASIS), spines posterior superior iliac (PSIS) and the symphysis pubis. After the demarcation of anatomical points was made photographic records, always in the same room, with white background, adequate lighting and as a plumb line attached to the ceiling with two Styrofoam balls glued on the wire, spaced between them to a meter, for further image calibration in the program. The digital camera was located at three meters away from the participant, arranged parallel to the floor, on a level tripod at a height equivalent to half of the participant's stature. After the photographing images were transferred to the computer and where the analysis of posture was made of participants through the Software for Postural Assessment SAPO version 0.68 by a blinded examiner familiar with the program, which followed the following guidelines: image calibration, marking points by the protocol, generate analysis report and export to Excell. Perineal assessment was carried out which is the evaluation of muscle function evaluating: symmetry, coordination, strength and endurance. The research is in accordance with the guidelines and requirements of Resolution No. 466/12 of the Ethics and Research Committee of the Bahian School of Medicine and human health (CAAE: 35038914.3.0000.5544)

Results

The sample consisted of 9 women with a mean age of 48±8 micturition urgency. 4(44%) had constipation (criterion of Rome III) and all the participants already had childbirth, 6 (66%) vaginal delivery. The median degree of muscle strength was 3 (3-4) and the mean in grams of urine loss assessed by pad test 1 hour was 5±2.6. When analyzed the horizontal alignment of the pelvis on the right side and left views, all participants had a tendency to anteversion pelvis and lumbar concavity with average -16.9 ± 4.2 in the right side view and -16.3 ± 4.5 at the side left. And the angle drawn between the pubis and the anterior superior iliac spine, establishing the nutation and contranutação, there is a tendency to open the top of the pelvic ring, with an average of 101.9 ± 7.7

Interpretation of results

The sample consisted of 9 women with a mean age of 48±8 micturition urgency. 4(44%) had constipation (criterion of Rome III) and all the participants already had childbirth, 6 (66%) vaginal delivery. The median degree of muscle strength was 3 (3-4) and the mean in grams of urine loss assessed by pad test 1 hour was 5±2.6. When analyzed the horizontal alignment of the pelvis on the right side and left views, all participants had a tendency to anteversion pelvis and lumbar concavity with average -16.9 ± 4.2 in the right side view and -16.3 ± 4.5 at the side left. And the angle drawn between the pubis and the anterior superior iliac spine, establishing the nutation and contranutação, there is a tendency to open the top of the pelvic ring, with an average of 101.9 ± 7.7

Concluding message

There was a predominance of pelvic anteversion and muscle strength decreased in women with stress urinary incontinence.

References

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2. Smith MD, Russell A, Hodges Pw. Disorders of breathing and continence have a stronger association with back pain than obesity and physical activity. *Aust. J. Physiother.* 2006; 52:11-6.
3. Knorst MR, Resende TL, Santos TG, Goldim JR. The effect of outpatient physical therapy intervention on pelvic floor muscles in women with urinary incontinence. *Braz J Phys Ther.* 2013; 17(5):442-449

Disclosures

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