# IS THERE A DIFFERENCE IN PELVIC FLOOR MUSCLE PRESSURE IN NATURAL AND SURGICAL MENOPAUSE? (#561)

ANGELO P<sup>1</sup>, LEITÃO A<sup>1</sup>, OLIVEIRA M<sup>1</sup>, NASCIMENTO N<sup>1</sup>, MAGALHÃES A<sup>1</sup>, MICUSSI M T<sup>1</sup>

# INTRODUÇÃO

The natural aging of the muscle fibers with consequent hypotrophy or replacement by adipocytes can contribute in an effective way to muscular dysfunctions. Besides the aging, factors such as menopause time and age of onset of menopause influence the may functional of pelvic floor muscles (PFM) <u>and</u> there is strong a correlation with the appearance of alterations in the PFM, such as urinary incontinence (UI) [1]. Thus, this study **aims to compare the PFM** pressure of postmenopausal women with a history of natural and surgical menopause.

#### DESIGN

- The study was approved by the Ethics Committee.
- A crosssectional study of 117 volu nteers allocated by spontaneous demand and divided into two gro ups: natural menopause (NM; n =62) and surgical menopause (S M; n = 55).
- It was used the Peritron 9300V The patients were instructed on the correct way to contract PFM avoiding the Valsalva maneuver, to perform muscle and contraction with the greatest possible. strength Volunteers were also instructed to empty bladders before their the manometry.
- The probe was inserted with the equipment turned off. Three maximum voluntary contraction of PFM was requested, with two to three seconds of duration each. The command was "squeeze the probe".

- The assessment was performed by a single evaluator.
- The descriptive statistics were used to pres ent the clinical data and for comparison between the type of menopause and PF M manometry, the T test was used for ind ependent samples. This study was approv ed by the research ethics committee

## RESULTS

- It were analyzed 109 volunteers. Three volunteers were excluded because they felt pain during the introduction of th e probe and five because they could not dissociate the contraction of the PFM. The mean of age was 57.96 years (± 6.99; CI: 55.98 - 59.97) in NM and SM was 56.00 years (± 8.07; CI: 53.80 - 58.20) (p = 0.79).
- The mean time of menopause was 8.38 years (± 6.45, CI: 6.50 10.26) in the NM and 15.01 years (± 10.69, CI: 12.09 17, 93) in the SM (p =0.00).
- Regarding the PFM pressure, NM presented a mean of 34.38 cmH<sub>2</sub>O (± 23.67; Cl: 29.89-38.88) and the SM was 27.35 cmH<sub>2</sub>O (±18.84; Cl: 22,21-32.49) (p = 0.04).

## CONCLUSION

There was difference in pelvic floor muscle pr essure of postmenopausal between women with history of natural and surgical menopause.

Reference

Thompson JA, O'Sullivan PB, Briffa NK, Neumann P. Assessment of voluntary pelvic floor muscle contraction in continent and incontinent women using transperineal ultrasound, manual muscle testing and vaginal squeeze pressure measurements. Int Urogynecol J Pelvic Floor Dysfunct. 2006;17(6):624–630

Angelo PH, Varella LRD, de Oliveira MCE et al. A manometry classification to assess pelvic floor muscle function in women. Plos One. . 2017; 12(10): 1-8.

Slieker-ten Hove MC, Pool-Goudzwaard AL, Eijkemans MJ, Steegers-Theunissen RP, Burger CW, Vierhout ME. Pelvic floor muscle function in a general female population in relation with age and parity and the relation between voluntary and involuntary contractions of the pelvic floor musculature. Int Urogynecol J Pelvic Floor Dysfunct. 2009;20(12):1497–1504. pmid:19756345

