

16 - EVALUATION AND TREATMENT OF THE LOSS OF THE PERINEAL FUNCTION IN CLIMACTERIC WOMEN

ANGELA TAISE DA BOIT
ELIZANGELA SERRA FERREIRA

Faculdade Assis Gurgacz – FAG, Cascavel, Paraná, Brasil.
angel-taise@hotmail.com

INTRODUCTION

For Gonçalves & Merighi (2009), the climacteric represents an event defined as a transition from the reproductive to reproductive failure which manifests itself due to hormonal changes involving the woman's body.

The climacteric syndrome begins at about age 40, extending to the end of life and is characterized in response to declining production of ovarian steroids compromising the quality of life of women in this age group (MORAES et al, 2007).

According to Freitas et al, (2006), menopause marks a climacteric, which corresponds to your last period, after being recognized after twelve months of its occurrence. However Nievas et al, (2006), describes this period corresponds to a broader process of change in the physical, psychological and social, marked by considerable stress, however, these factors are part of the woman's lifetime.

According to Zanetti et al, (2007), the pelvic floor is made up 70% of fibers or tonic type I which are responsible for slow contraction, and 30% are phasic fibers or type II, which are fast twitch.

When there are anatomical and functional deterioration of the pelvic muscles, related to the aging process, it is necessary to recover the physical strength and elasticity of vaginal (AMARO et al, 2003).

So Baracho (2002), emphasizes the importance during the climacteric to prevent possible diseases, slow the natural decline of the body and include aspects of maximizing individual abilities of humans. The gynecological therapy, however, is of essential importance, since it has alternatives for prevention and treatment of changes caused in climacteric women seeking to become more prepared and healthy.

According to Dreher et al, (2009), the vaginal cones are a therapy method that stimulates the activity of muscle contraction of the pelvic floor more appropriate because it promotes the recruitment of muscle fibers and improves proprioception of muscles.

To Freitas et al, (2006), the cone can be considered active or passive, and active in the presence of the cone into the vagina facilitates the perception that the patient contract the muscle voluntarily getting the unique learning of perineal exercises. On the passive cone, the sense of the cone out of the vagina causes an involuntary reflex contraction of pelvic muscles (fibers I and II) in order to keep it in position.

According to Nolasco et al, (2008), kinesiotherapy comprising the Kegel exercises, it became an integral part of conservative treatments for disorders of the pelvic floor muscles, developed by physician Arnold Kegel, consists of repeated contractions, controlled and sustained the muscles of the pelvic floor order to increase muscle strength, improve resistance to fatigue, as well as improving mobility, flexibility and muscular coordination.

In this light, the study aimed to promote knowledge of the pelvic floor muscles, to assess the quality of perineal muscle contraction, to assess the influence of Kegel exercises as a sexual life of climacteric women and to compare the results obtained in questionnaires.

METHODOLOGY

The study was characterized as a field research, exploratory, qualitative and quantitative, slitting, which had as main objective to evaluate the influence of Kegel exercises in the loss of function of the perineal muscles of the pelvic floor in climacteric women.

For this, we observed a sample of 20 women, aged between 40 to 76 years, 10 participants in each group. Characterized as Group I: women who participated in the Citizenship Action Project and a private institution of higher education in the West of Paraná, group II: women who worked in cleaning (janitorial) from the same institution. This sample was chosen because the group I performed physical activity and group II did not perform physical activity, respectively, and this information is of fundamental importance for the comparison of both groups.

Inclusion criteria for all groups were: being female, aged between 40 and 76 years who were experiencing menopause, do not be menstruating on the day of assessment, absence of BMI (Body Mass Index) greater than 30 kg / m² and sign the Consent Form. For the group I was still set to test physical activity over 6 months and for group II the criterion was not practicing any form of physical exercise for at least 6 months. Exclusion criteria were women who did not fit these pattern.

It should be noted that 20 women were surveyed in the evaluation, but in this review was reduced to 13 because the group I, 3 participants were excluded from the study due to withdrawal and non-attendance to the days and times scheduled for reevaluation and in group II were excluded 4 participants, also on grounds of abandonment and failure to re-evaluation.

The first procedure used in the study was the application of the questionnaire Female Sexual Quotient (SQ-F), developed in Brazil and containing approaches related to female sexual function, composed of open and closed questions, which is read and answered by the researcher to avoid embarrassment in cases of women who could read and write.

Then held a physical therapy evaluation of pelvic floor muscles through the intravaginal device test (DIV) using vaginal cones labled Femtone. The vaginal cones are five capsules with the same shape and size, but with weights that vary with the number (No. 1 = 20 g, n° 2 = 32.5 g, n° 3 = 45 g, n° 4 = 57, 2 g, n° 5 = 70 g) where the order of the cones was introduced according to the scale of the # 1 performer 5 respectively and ranking of the examination was in accordance with the cone growth. In this evaluation, the volunteer should be in a supine position, with hips and knees bent, naked from the waist down and covered with paper towel. For each cone introduced, the subject performed an increasing sequence of standard exercises that appeared respectively walk for 1 minute, up and down stairs for 30 seconds, jumping 4 times, squatting and getting up 4 times and 4 times for cough hold the cone introduced the vagina (Bernard et al, 2000). The test was stopped when there was loss of cone tested.

The volunteers were informed about the exercises of perineal contractions, so that to achieve the goals, the exercises should be carried out during their daily activities through Kegel exercises, and this time they should fill a table supplied by the researcher to organize the number of contractions of the perineal held weekly, a total of 4 weeks (1 month).

After this period, all participants were subjected to the same procedures with the reapplication of the questionnaire and review with vaginal cones.

Prior to the procedures (evaluation and review), the cores were taken to disinfect where diluted to 10 ml of enzyme detergent in 2 gallons of water, where the cores were left in a plastic bowl labeled with the time of placement and time of withdrawal by a time of 20 minutes to avoid contamination with biological material. Then they were taken to sterilization in ethylene oxide and packaged in sealed plastic. O prazo de validade da esterilização é de 1 ano. The validity of sterilization is 1 year.

The statistical analysis was performed using the Student t test. To compare the samples were considered significant if $p < 0.05$, considering the differences between the values observed in step assessment and reassessment.

RESULTS AND DISCUSSION

The average age of participants in group I was 67 years, with ages ranging from 57 to 76 years. For Group II the average was 45 years, with ages ranging from 40 to 56 years.

Regarding the number of pregnancies of the total sample, one of them had sons and one participant had 10 children, and the average number of children per participant was 4 children. The type of delivery, showed that 75% of them had vaginal delivery, 15% by cesarean section and 10% had both types of delivery, and 25% underwent episiotomy and 75% did not undergo episiotomy.

It was observed that 25% of the volunteers have analyzed urogynecologic underwent surgery at some point in life, while 75% had never undergone any surgical procedure urogynecological.

The onset of sexual activity, 25% of the women started at 19, 65% started between 16 and 19 years, 2 started at 13 and 14 years, and only 1 in 42 years. It was also observed that the average age of sexual initiation was 19.4 years with a standard deviation of 6 years.

The average number of sexual partners in 60% of the total sample was 1 partner. In calculating the average, were less the two participants who had 9 and 10 partners.

The study showed that 55% of the total sample of participants were sexually active, and among these, 10% were part of group I and 90% in group II and its major discomfort during sexual intercourse included pain or burning, lack vaginal lubrication, lack of interest, desire and libido and find it difficult to penetrate because of their vagina or the muscles of the thigh to be very contracted and 45% of participants reported sexually inactive, these 90% were in group I and 10% of group II.

Observed in this study that there is a strong negative correlation ($r = -0.78$) between the variables age and sexual activity, with 5% significance level ($p < 0.002$), ie, the younger a woman has, the greater their sexual activity.

These findings confirm studies Saciloto & Lorenzi (2006), conducted with 206 postmenopausal women aged 45 to 60 years, which showed that 85% of women with a mean age of 53.5 years, were sexually active, and that the majority of whom reported decreased frequency of intercourse after menopause.

TABLE 1: Notes minimum, average and maximum rating awarded by practitioners and non practitioners of physical activity in relation to the quality of sexual life

Physical Activities	Mean (\pm SD)	Lowest grade	Maximum grade	$p < 0.05$
Practice	2.20 (\pm .23)	1	4	$p = 0.046$
Don't Practice	3.33 (\pm 1.06)	1	5	

SOURCE: Data from the author, 2009.

According to the above table (table 1), the assessment, the average grade for the quality of sexual life, conferred by the volunteers who did not exercise was higher than the average of the physically active, and the minimal scores were equal, however, the values were different This means that there is significant difference at a 5% level of significance in the quality of sexual life of women who did not practice for those who practiced physical activities ($p = 0.046$).

TABLE 2: Notes minimum, average and maximum re-awarded by practitioners and non practitioners of physical activity in relation to the quality of sexual life

Physical Activities	Mean (\pm SD)	Lowest grade	Maximum grade	$p < 0.05$
Practice	2.00 (\pm 1.15)	1	4	$p = 0.004$
Do Not practice	4.17 (\pm 0.98)	3	5	

SOURCE: Data from the author, 2009.

Table 2 shows that the revaluation, the average grade for the quality of sexual life conferred by women who do not engage in physical activities was higher than the average score of the evaluation, ie after the contractions of perineal exercises, quality sex life has improved for these women. The notes minimum, maximum and average of those who performed physical exercise, was maintained, concluding that there is significant difference between the means at a 5% level of significance for the group of non-practitioners ($p = 0.004$).

Of the 6 volunteers who did not exercise and participated in the review, 2 kept the note given above, while 4 of them increased the note, ie the reassessment was an improvement in sexual life of these women.

These results are not in agreement with studies Gordia et al, (2007), conducted with 60 elder women of the city of Fortaleza, and 30 of them engage in physical activities and 30 were not engaged in any program of regular physical activity, to analyze and compare the quality of life of these women could be observed that the group practicing physical exercise showed better results in all areas examined, including the physical, psychological, social, environmental and general, suggesting that physical activity directly or indirectly on the quality of life of these women.

However, it was observed that physical activity as a single factor had no effect on the improvement in the perineal practicing regular physical activity.

TABLE 3: Monthly average of perineal contractions of women practitioners and not physically active

Physical Activities	Mean (\pm SD)	Minimum Number	Maximum Number	$p < 0.05$
Practice	35.43 (\pm 22.09)	6	67	$p = 0.22$
Do Not Practice	19.33 (\pm 22.11)	2	62	

SOURCE: Data from the author, 2009.

It can be seen in Table 3, the mean monthly contractions of women who practiced physical activities was about 35 a day, with a standard deviation of 22 contractions. who did not exercise had an average of about 19 contractions a day, with a standard deviation of 22 contractions. The minimum number of contractions of the practitioners of exercise during the month was 6 and a maximum equal to 67, and did not practice, was 2 and 62 respectively. It can be concluded at a significance level of 5%, the difference between women who practiced and did not practice physical activities in relation to the average number of monthly contractions was not significant ($p < 0.005$).

It was then possible to show that women who did not exercise had a greater physiological response, for improved quality of sexual life, which can be explained by an increased awareness of the perineal muscles and better proprioceptive learning.

According to Moreno (2004), in physical therapy awareness of the pelvic and perineal region of women with sexual dysfunction and urinary incontinence is very important. Whereas approximately 37% of women have body awareness of your pelvic region and can not contract their perineal muscles when requested. It is for these patients physiotherapist Up proprioception in the region.

The average held cones in the evaluation by the participants who practiced physical exercises was 2 cones, whereas the participants who did not practice, was 1 cone. The standard deviations of both groups were about 2 cones. It is important to note that the reevaluation the average cone of physically active was 2 cores with a standard deviation of 4 cones, higher than the group of participants who did not practice physical exercises. The maximum number of cones was re-insured in the 5 cones while the other group was 2 cones. It can be concluded at a 5% level of significance, the difference between the means of two groups was not significant in both the evaluation and reassessment.

According to these results we can say that practicing regular physical activity, had a degree of self-perception and knowledge of the perineal muscles, therefore, did not show satisfactory results in the gain of contractile activity in the region.

In the literature no studies were identified using a methodology similar to this, addressing the influence of a proposed physical activity associated with about Kegel exercises to strengthen the perineal muscles and the impact on quality of life of women.

However, in studies conducted by Matheus et al, (2006), as was to examine the influence of perineal exercises and vaginal cones associated with postural reeducation exercises of the pelvis for the treatment of urinary incontinence in 12 women with mean age of 52.3 years. The volunteers who used vaginal cones showed improvement in the contraction of the perineal muscles.

Of the 6 volunteers who practiced physical activities and undertaking the review, 50% increased the number of cones insured and maintained the number of cones uninsured. The volunteers who did not practice physical activities, only one passed the cone No. 1 to No. 2 cone, the other maintained or decreased the number of cones previously insured. And yet, we observed better results in improving the quality of life sex after reapplication of the questionnaire in the group that did not engage in physical activity, this may also be related to age, with fewer children and type of delivery.

Porting, despite the gain of perception and awareness of the pelvic floor with the use of Kegel exercises in group II the same in this study had any influence on muscle action since there was no gain support of the cones in the reassessment of the same group.

According Grosse & Senglea (2000), the thickness of the perineal muscles appears to decrease with age and, consequently, there is a decrease in muscle strength. In addition Fattini & D'Angelo (2002), says that the health of the pelvic muscles is essential to maintaining a good tone and elasticity. However, age, lack of exercise in general, and even pregnancy and childbirth (vaginal or cesarean) mean that these muscles are weak.

Importantly for this analysis, we have only considered the number of sexually active women in both groups I and II, both in assessing how the reassessment.

CONCLUSION

Based on this study, it was found that Kegel exercises, as well as the physical exercise on the physiological perineal muscle, since these responses were evident in women who do not engage in regular physical activity, because they offered had won the respect of perception and awareness of the pelvic floor muscles.

Because there are few studies that seek to prove the efficiency of physical activity associated with Kegel exercises on the perineal muscles, and also the great importance of knowing the impact on quality of life for women in menopause, there is a need for further research addressing these issues.

Therefore, we suggest further studies addressing the use of Kegel exercises as initial stimulus for the treatment of perineal loss of function in women.

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AUTORA PRINCIPAL: ANGELA TAISE DABOIT

Rua Amárido Passos, n° 357

Bairro FAG/ Cascavel – Paraná

Telefone: 42 84065350

angel-taise@hotmail.com

EVALUATION AND TREATMENT OF THE LOSS OF THE PERINEAL FUNCTION IN CLIMACTERIC WOMEN

ABSTRACT

The Climacteric is a transition from the reproductive to the non-reproductive marked by changes that involve the body of the woman. Gynecologic therapy has options for prevention and treatment of changes caused in the climacteric. The aim of this study was to evaluate the influence of Kegel exercises in the loss of function of the perineal muscles of the pelvic floor in menopausal women. We evaluated 20 women aged 40 to 76 years, divided into two groups: Group I: physically active and Group II: non-practicing physical activity. Both groups filled out a questionnaire Female Sexual Quotient (SQ-F) related to female sexual function and performed perineal exercises contractions. Each participant received a table to organize the number of contractions performed weekly on a total of 4 weeks. It was observed that most women reduces the frequency of sex after menopause. Physical activity did not interfere in the improvement of perineal function. Physiological response were more on women who did not exercise. It was found that the Kegel exercises and physical exercise on the physiological perineal muscle.

KEYWORDS: Climacteric. Kegel exercises. Quality of sexual life.

ÉVALUATION ET TRAITEMENT DE LA PERTE DE LA FONCTION PÉRINÉALE CHEZ LES FEMMES DANS LE CLIMATÈRE.

RÉSUMÉ

Le climatère est une phase de transition entre la période reproductive pour la non reproductive marquée par des changements qui impliquent l'organisme de la femme. La physiothérapie gynécologique dispose d'alternatives pour prévention et traitement des modifications causées dans le climatère. L'objectif de l'étude a été évaluer l'influence des Exercices de Kegel dans la perte de la fonction périnéale de la musculature du plancher pelvien chez les femmes ménopausées. Nous avons évalué 20 femmes âgées de 40 à 76 ans, répartis en deux groupes : Groupe I : praticiens d'activité physique et Groupe II : non pratiquant d'activité physique. Les deux groupes ont rempli le questionnaire Quotien Sexuel Féminin (QS-F) rapporté à la fonction sexuelle féminine et ont réalisé des exercices de contractions périnéales. Chaque participante a reçu un tableau pour organiser le nombre de contractions réalisées hebdomadairement, en totalisant 4 semaines. Il s'est observé que à la majorité des femmes il diminue la fréquence de relations sexuelles après la ménopause. L'activité physique n'est pas intervenue dans l'amélioration de la fonction périnéale. Les femmes qui ne pratiquaient pas de l'activité physique ont eu plus grande réponse physiologique. Il s'est vérifié que les Exercices de Kegel et la pratique d'exercices physiques influencent dans la réponse physiologique musculaire périnéale.

MOTS- CLES: Climatère. Exercices de Kegel. Qualité de la vie sexuelle.

EVALUACIÓN Y TRATAMIENTO DE LA PÉRDIDA DE LA FUNCIÓN PERINEAL EN MUJERES EN EL CLIMATERIO

RESUMEN

El climaterio es una fase de transición entre el periodo reproductivo para el no reproductivo marcado por cambios que envuelven el organismo de la mujer. La fisioterapia ginecológica dispone de alternativas para prevención y tratamiento de las alteraciones ocasionadas en el climaterio. El objetivo del estudio fue evaluar la influencia de los Ejercicios de Kegel en la pérdida de la musculatura del suelo pélvico en mujeres climatéricas. Fueron evaluadas 20 mujeres con edad entre 40 a 76 años, divididas en dos grupos: Grupo I: practicantes de actividad física y Grupo II: no practicante de actividad física. Ambos los grupos rellenaron el cuestionario Coeficiente Sexual Femenino (CS-F) relacionado a la función sexual femenina y realizaron ejercicios de contracciones perineales. Cada participante recibió una tabla para organizar el número de contracciones realizadas semanalmente, totalizando 4 semanas. Se observó que la mayoría de las mujeres disminuye la frecuencia de relaciones sexuales después de la menopausia. La actividad física no interfirió en la mejora de la función perineal. Tuvieron mayor respuesta fisiológica las mujeres que no practicaban actividad física. Se verificó que los Ejercicios de Kegel y la práctica de ejercicios físicos influyen en la respuesta fisiológica muscular perineal.

PALABRAS-CLAVE: Climaterio, Ejercicios de Kegel, Calidad de vida sexual.

AVALIAÇÃO E TRATAMENTO DA PERDA DA FUNÇÃO PERINEAL EM MULHERES NO CLIMATÉRIO

RESUMO

O climatério é uma fase de transição entre o período reprodutivo para o não reprodutivo marcado por mudanças que envolvem o organismo da mulher. A fisioterapia ginecológica dispõe de alternativas para prevenção e tratamento das alterações ocasionadas no climatério. O objetivo do estudo foi avaliar a influência dos Exercícios de Kegel na perda da função perineal da musculatura do assoalho pélvico em mulheres climatéricas. Foram avaliadas 20 mulheres com idade entre 40 a 76 anos, divididas em dois grupos: Grupo I: praticantes de atividade física e Grupo II: não praticante de atividade física. Ambos os grupos preencheram o questionário Quociente Sexual Feminino (QS-F) relacionado à função sexual feminina e realizaram exercícios de contrações perineais. Cada participante recebeu uma tabela para organizar o número de contrações realizadas semanalmente, totalizando 4 semanas. Observou-se que a maioria das mulheres diminui a frequência de relações sexuais após a menopausa. A atividade física não interferiu na melhora da função perineal. Tiveram maior resposta fisiológica as mulheres que não praticavam atividade física. Verificou-se que os Exercícios de Kegel e a prática de exercícios físicos influenciam na resposta fisiológica muscular perineal.

PALAVRAS-CHAVE: Climatério. Exercícios de Kegel. Qualidade de vida sexual.

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