

**86 - URINARY INCONTINENCE DURING EXERCISE**

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**INTRODUCTION**

According to the definition of the International Continence Society (ICS), urinary incontinence would be all the involuntary loss of urine clinically demonstrable, that causes social or hygienic problem (ANDRADE D. J, et al 2011). There are three types of urinary incontinence more common, which are the Stress Urinary Incontinence ( SUI ) Urinary Urgency Incontinence ( Overactive Bladder - IUU ), and Mixed Urinary Incontinence (MARIA HELENA B, 2008). The main symptoms of urinary incontinence in this population is classified as stress urinary incontinence which is the involuntary loss of urine resulting from any activity that leads to increased intra-abdominal pressure exceeds urethral closure pressure in activities such as coughing, laughing , lifting objects or physical exertion. The term incontinence "effort" was initially coined by Sir Eardley, which defined this condition as "loss of urine through the urethra intact, under certain conditions that cause increased intra-abdominal pressure" (BERNARDES e colaboradores, 2012).

According weinberger (2006), stress incontinence is defined as true the involuntary loss of urine that occurs when, in the absence of a detrusor contraction, the intravesical pressure exceeds the intra-urethral pressure. When the bladder is well sustained increased intra-abdominal pressure does not preclude that continence is maintained. To Botelo, et al, urinary incontinence is considered one of the new epidemic of the XXI century exacerbated by the continuous increase in life expectancy.

The pelvic floor muscles (AP) have the function to contain and keep the abdominal and pelvic organs in place, exert control over urinary incontinence, fecal and sexual activity and balance the effects of intra-abdominal and vaginal. It consists of the following tubular structures: vagina and urethra (at the front) and the anus (at the rear) and the main muscles: bulb spongy ischial cavernous, transverse perineal, urethral sphincter, pubo coccygeal and levator ani (Silva e Silva, 2003; Graziottin e Giraldi, 2006; Palma e Portugal, 2009).

The prevalence of stress urinary incontinence (SUI) in women and young athletes who exercise irregularly is, respectively, 40 and 8%. About 50% of women without the classic risk factors for urinary incontinence - parity, age, obesity or drug use - may have urinary loss during simple activities or exercises any provocative. Conceptually, we can relate the support exerted by the pelvic floor and increased intra-abdominal pressure. Sports that include jumps or maximum abdominal contraction exercises, repeatedly, is an important factor in the genesis of urinary incontinence. Self movements result in impact strength of the pelvic floor 3 to 4 times greater than the weight of the athlete. This impact on the effect of pelvic floor support may be abated as a simultaneous contraction of these muscles and equally strong (SEGLER & GROSSE, 2002).

Thus becoming apparent causes and most frequent factors that can lead to urinary incontinence, whatsoever the classification, this study aims to identify the incidence of personnel practicing intense physical activities that have some loss of urine during the thereof.

**MATERIALS AND METHODS**

The present research it is a study of quantitative trait descriptive, aimed at collecting data from patients with urinary incontinence by practicing physical activities.

The research was conducted through the questionnaires with academic course of Physical Education Faculdade Assis Gurgacz - FAG , Cascavel Pr, which signed a free and enlightenment, can not participate or withdraw from the research at any time. Were interviewed seventy women who practiced some type of physical activity and age group 18-25 years, who responded individually with each woman answer your questionnaire and may request assistance from the researcher who remained on site.

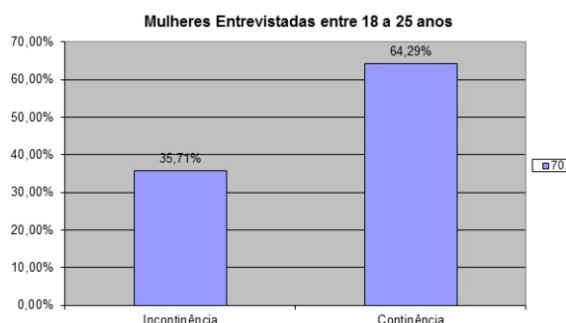
The criteria adopted for the data analysis were selecting women who have or have had some time in their practical exercises UI, in order to show the results in graph form the relationship between physical activity and urinary incontinence, and further interference that caused the UI in practical exercises in these women they are young adults.

**RESULTS**

We interviewed 70 women whose ages ranged from 18 to 25 years, from the questionnaires were identified in 25 interviewed about 35.71% IU population had at some point in their sporting life and the rest of the interviewees showed no complaint with respect to practice exercises (Graph 1).

In Graph 2 it can be seen that a percentage of 35.71% were incontinence while performing their sport, with respect to 19 women who practice the high-intensity activities and also had urinary incontinence with 24% or 6 women had UI practicing low-intensity exercise.

Graph 1



Graph 2



## DISCUSSION

The participants of this study were female, aged 18 to 25 years of which 35.71% of this population had urine loss at some point in their sporting life.

The theory conceived by Peter Petros and Ulmsten, urinary continence is considered primarily to the efforts that incontinence, urgency and bladder emptying changes result from changes of the tissue elements suburethral support, ligaments and muscles of the pelvic floor. According to this theory, changes the voltage applied by the muscles and ligaments fascia on the vaginal wall juxtaposed to determine the opening or closure of the bladder neck and urethra. Changes of tension on the vagina would determine also the premature activation of micturition reflex triggering of involuntary detrusor contractions.

Often the etiology of incontinence is multifactorial. The menopause by reducing circulating hormones, pregnancy, vaginal delivery suggesting trauma to the pelvic floor neuromuscular, neurological or biochemical often associated with the aging process, the presence of predisposing conditions such as diabetes mellitus, multiple sclerosis, dementia, depression, obesity, bladder cancer, gallstones, recurring urinary infections and parkinsonism, among others, are predisposing factors for urinary incontinence (KLÜBER et al, 2002).

According Zucchi 2003, about 50 % of women who do not have the risk factors mentioned above, may have loss of urine during simple daily activities or exercise any provocative .

The stress urinary incontinence (SUI) or stress is defined as an involuntary loss of urine during increased abdominal pressure in the absence of detrusor muscle contraction. Then, the resulting loss of structural support for the proximal urethra and bladder neck, resulting in loss of urine with no increase in intra-abdominal pressure, because the proximal urethra is no longer pressed toward the pubic symphysis and allows the exhaust urine (GALHO et al, 2001).

Therefore, the EUI understood by elimination of urine that occurs in response to the sudden growth of the intra-abdominal pressure, that is, unintentional deletion of urine that occurs when the intravesical pressure exceeds the maximal intraurethral pressure in the absence of muscle contraction detrusor (PICKLES et al. 2002).

## CONCLUSION

The analysis of health status and quality of life of patients is essential for the evaluation of new therapeutic interventions, it detects the outcomes of such interventions in the lives of patients (MORENO, 2004).

Often observed in clinical practice, the social exclusion of patients with urinary incontinence. This exclusion does not necessarily is imposed by society rather than by the patient herself, being aware of their personal difficulties, refuses to attend some social to avoid episodes of urinary leakage in public (FELIX, L. I, 2005).

According to the AHCPR, the female population, experience with episodes of urinary incontinence is a condition that occurs not only among older women, but also among young and middle-aged. Urinary problems are not natural consequences of age and is not an exclusive problem of aging.

Therefore it can be concluded from this study that these pelvic floor disorders although the incidence is higher in elderly women, showed that 100% of the survey population, 35,71% of this young adult women have suffered the loss of urine some point in their sporting life, thus evidencing the importance of an early diagnosis for possible intervention and care in this person's life.

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### URINARY INCONTINENCE DURING EXERCISE

#### ABSTRACT

Introduction: Urinary incontinence (UI) is one of the problems that affect multiple people being more common in the elderly. The practice of physical causes intraocular pressure abdominal increase, thus making the depression of the pelvic organs and often cause loss of urine. Evaluate urinary incontinence and quality of life through the questionnaire ICIQ - SF (International Consultation on Incontinence Questionnaire - Short Form), and a questionnaire whose complementary function to verify the impact of life and the kind of activity that provides pathology. Objective: To evaluate the incidence of urinary incontinence during exercise. Methods: The present research it is a study of quantitative trait descriptive, aimed at collecting data for women 18 to 25 years with urinary incontinence by the practice of physical activity among 70 questionnaires. Results: Based on the 70 questionnaires were identified in 25 of them a percentage of 76% with respect to 19 women who practice the high-intensity activities had urinary incontinence, and even with 24% or 6 women had IU practicing low-intensity exercise. Conclusion: In the UI there are several risk factors are more common in older people. It is concluded in this study that 100% of the survey population, about 35,71% of the women who practiced some type of physical activity, already had an episode in his sporting life being more common in more intense activities which cause a greater increase in abdominal pressure.

**KEYWORDS:** Urinary Incontinence physical activity, and Pelvic Floor.

### INCONTINENCE URINAIRE PENDANT L'EXERCICE

#### RÉSUMÉ

Introduction: L'incontinence urinaire (IU) est l'un des problèmes qui affectent plusieurs personnes étant plus fréquente chez les personnes âgées. La pratique des causes physiques pression intraoculaire augmentation abdominal, rendant ainsi la dépression des organes pelviens et provoquent souvent des pertes d'urine. Évaluer l'incontinence urinaire et la qualité de vie à travers le questionnaire ICIQ -SF (Consultation internationale sur l'incontinence Questionnaire - Formulaire abrégé), et un questionnaire dont la fonction complémentaire de vérifier l'impact de la vie et le genre d'activité qui fournit pathology. Objectif: évaluer l' incidence de l'incontinence urinaire à l'effort. Méthodes: La présente étude est une étude de caractère quantitatif descriptive, vise à recueillir des données pour les femmes de 18 à 25 ans souffrant d'incontinence urinaire par la pratique de l'activité physique chez les 70 questionnaires. Résultats: Basé sur les 70 questionnaires ont été identifiés dans 25 d'entre eux un pourcentage de 76% par rapport aux 19 femmes qui pratiquent des activités à haute intensité ont eu l'incontinence urinaire, et même avec 24% ou 6 femmes avaient UI pratique d'un exercice de faible intensité. Conclusion: Dans l'interface utilisateur il ya plusieurs facteurs de risque sont plus fréquents chez les personnes âgées. Il est conclu dans cette étude que 100% de la population de l'enquête, environ 35,71% des femmes qui pratiquaient un certain type d'activité physique, déjà eu un épisode de sa vie sportive étant plus fréquente dans des activités plus intenses qui provoquent une augmentation plus importante la pression abdominale.

**MOTS-CLÉS:** incontinence urinaire de l'activité physique et du plancher pelvien.

### INCONTINENCIA URINARIA EN EJERCICIO

#### RESUMEN

Introducción: La incontinencia urinaria (IU) es uno de los problemas que afectan a múltiples personas siendo más común en los ancianos. La práctica de causas físico la presión intraocular aumento abdominal, por lo tanto, la depresión de los órganos de la pelvis y, a menudo causar la pérdida de orina. Evaluar la incontinencia urinaria y la calidad de vida mediante el cuestionario ICIQ-SF (Consulta Internacional sobre Incontinencia Cuestionario - Short Form), y un cuestionario cuya función complementaria para verificar el impacto de la vida y el tipo de actividad que proporciona patología. Objetivo: Evaluar la incidencia de la incontinencia urinaria durante el ejercicio. Métodos: El presente trabajo es un estudio de carácter cuantitativo descriptivo, destinado a obtener datos de las mujeres de 18 a 25 años con incontinencia urinaria por la práctica de actividad física entre los 70 cuestionarios. Resultados: A partir de los 70 cuestionarios fueron identificados en 25 de ellos un porcentaje del 76% con respecto a 19 mujeres que practican las actividades de alta intensidad tenían incontinencia urinaria, y hasta con un 24% o 6 mujeres tenían IU la práctica de ejercicios de baja intensidad. Conclusión: En la interfaz de usuario que hay varios factores de riesgo son más comunes en las personas mayores. Se concluye en este estudio que el 100% de la población de la encuesta, alrededor de 35,71% de las mujeres que practican algún tipo de actividad física, ya tenía un episodio de su vida deportiva es más común en las actividades más intensas que provocan un mayor aumento de la presión abdominal.

**PALABRAS CLAVE:** Incontinencia urinaria de la actividad física y del suelo pélvico.

### A INCONTINÊNCIA URINÁRIA DURANTE A PRÁTICA DE EXERCÍCIOS

#### RESUMO

Introdução: A incontinência urinaria (IU), é um dos problemas que afeta múltiplas pessoas sendo mais comum em idosos. A pratica de exercícios físicos faz com que a pressão intra-abdominal aumente, assim fazendo a depressão dos órgãos pélvicos e muitas vezes ocasionando a perda de urina. Avaliar a incontinência urinária e a qualidade de vida através do questionário ICIQ-SF (International Consultation on Incontinence Questionnaire – Short Form), e um questionário complementar cuja função verificar o impacto de vida e o tipo de atividade que proporciona a patologia. Objetivo: Avaliar a incidência da incontinência urinária durante a prática de exercícios. Métodos: A presente pesquisa trata-se de um estudo com característica quantitativa do tipo descritiva, que visa o levantamento de dados de mulheres de 18 a 25 anos com incontinência urinária pela pratica de atividades físicas, dentre 70 questionários aplicados. Resultado: Com base nos 70 questionários aplicados foi possível identificar em 25 deles uma porcentagem de 76% no que se refere a 19 mulheres que ao praticarem atividades de alta intensidade apresentaram incontinência urinária e ainda sendo que 24%, ou seja, 6 mulheres tiveram IU praticando exercícios de baixa intensidade. Conclusão: Na IU existem vários fatores de risco sendo mais comum em pessoas idosas. Conclui-se nesta pesquisa que 100% da população entrevistada, cerca de 35,71% das mulheres que praticavam algum tipo de atividade física, já apresentaram algum episódio em sua vida esportiva sendo mais comuns em atividades mais intensas as quais provocam um maior aumento da pressão abdominal.

**PALAVRAS-CHAVE:** Incontinência Urinaria; Atividade Física; Assoalho Pélvico.