#### 122 - URINARY INCONTINENCE AND PHYSIOTERAPEUTIC TREATMENT: EVALUATION OF RESULTS

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#### Introduction:

According to Kings and cols (2003), the urinary incontinence is, for many times, misinterpreted as a natural part of aging. Alterations that impair the social living such as embarrasement, depression and isolation, are frequently part of the clinical condition, causing great upset to familiar patients and relatives. From 30 to 50% of the people who suffer from urinary incontinence do not tell the doctor or the nurse about this fact spontaneously and they just look for the health service one year after the beginning of the symptoms because they think that the loss of urine is expected with the aging. They quietly have reduction of self-esteem, starting to get depressed, distressed and irritated (FONSECA et al, 2005). In the study of Guaresi and cols (2001), the women told a variety of reasons for them not to have searched for medical care to treat this problem. Most of these reasons suggest the low importance given to the symptoms, as patients thought they did not deserve medical attention or were not strong enough or didn't bother them so much, or even simply lack of time to have appointment with the doctor. Almost 10%, however, alleged lack of freedom to talk about these symptoms with the doctor. Kings and cols (2003), affirm that with the aging of the population the expenses will increase. It is necessary to be attentive to the new reality and better prepared to understand and to deal with the diseases of the elderly. Remembering that the urinary incontinence is an abnormal state and that if we carry out a proper approach, it will be, in the majority of the cases, solved or minimized. The physiotherapeutic resources to the woman with Urinary Incontinence, in particular the IUE has made possible in the great majority of the cases the cure, with no need of surgical intervention. The use of Eletroestimulation (EE) is extremely welcome to the treatments of the urinary incontinence. Added to this resource, the kinesitherapy for the proprioceptive and kinaesthetic awareness of these muscles can be used, and also the postural re-education through specific exercises for the postural standard of each patient. Knowing the great social and psychological impact generated by the urinary incontinence in the women's life, the general objective of this study was to verify the effectiveness of the physiotherapeutic treatment in the Urinary Incontinence.

#### Material and Methods:

The data of this study were obtained through the Project of Extension "Applied Physiotherapy to the Urinary Incontinence" a partnership of the CEFID/UDESC with a public Maternity Hospital. The sample of this study was composed of 10 (ten) women referred to the physiotherapy service after going through a Clinical evaluation by the Urologist doctor of the project. As for the inclusion criterion, patients who presented Urinary Incontinence to small and average efforts were select and as exclusion criteria, those patients that presented some characteristic of Mixing Urinary Incontinence or osteomuscular impairment that made it difficult the accomplishment of the kinesitherapy for the pelvic floor. The evaluation was performed through a file with personal data, current and former history of the IUE.

The appointments with the patients were carried out from two to three times a week, with duration of 50 minutes and, after 10 sessions, the reevaluation of the condition was established. The techniques that were udes were Eletroestimulation (EE) and kinesitherapy in all the sessions. The eletroestimulator with 2 independent channels and a bipolar pulse sender with symmetrical compensation was used with width of pulse = 500 microseconds and f = 65Hz for fast fibres during 12 minutes and width of pulse = 2 miliseconds and f = 20Hz for slow fibres per 12 minutes. The electrotherapy initiated with the patient lying with the legs resting on a small wedge, simulating the gynecological position. When the patient already presented objective improvement of the contraction, without using the parasite musculature (expository, abdominal and gluteus), the electrotherapy was carried out in the orthostatic position.

The Kinesitherapy, with contraction of the pelvic floor, was performed in several positions. In general, it followed the following scale of difficulty: patient in dorsal decubitus with supported feet; abduction and external rotation of hip (frog position); with the feet supported in the wall using shin pads of 500 grams; performing adduction and abduction of hip; lateral decubitus; bridge; sitting with supported feet; sitting with extension of knee and, in a more advanced period of training, standing with slight crouchs. After 10 sessions, the patient was submitted to a reevaluation whose focus was on checking of AFA, the use of daily protection and activities of urine loss.

## Presentation and Discussion of the Results

With the evaluation, it could be observed that, as for the characteristics of the sample, the age average of the 10 patients was 51,1 years old being that 30% were smokers, 70% were in menopause, 20% carried out hormoniotherapy, 80% already had gone through some type of gynecological surgery as: colpoperineoplasty, hysterectomy, salpingectomy or removel of hindrance of the tubes. The average of gestations was 3,9 and of the vaginal delivery, 53.2% did not go through episiotomy. As for the performance of physical activities, 60% affirmed they practice some such as walking or hydrogymnastics; while as for sexual activity 90% was active. Among the 10 patients, 7 used daily protection in an average of 4 exchanges a day.

The incidence of that problem is high, 1 every 4 women from 30 to 59 years old experience at least one episode of urinary loss throughout life (Cesare & Petricelli, 2002).

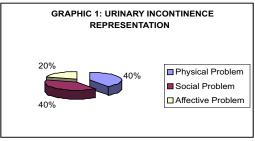
In the physical evaluation, the breathing standard was high costal, totalizing 40% of patients. The distance anus and vagina, in 60% of the cases was more than 3 centimeters. The tonus of the NFCR was norm tonic in 70% of the cases. The average found in the Test of the Anus Elevators Strength (AFA) was 2.2, as shown in TABLE 1.

# TABLE 1: Test of the Anus Elevators Strength

- 0 Without objective and subjective perineal function, not even to the touching
- 1 Without objective perineal function and subjective weak to the touching
- Objective perineal function little weak and subjective gift and to the touching
- 3 Objective perineal function little subjective gift and does not present resistance to the touching
- 4 Objective and subjective perineal function to the touching, keeping against resistance for 5 seconds.
- Objective and subjective perineal function to the touching, keeping against resistance for more than 5 seconds.

During the evaluation, the patients were questioned about the representation of the incontinence in their daily.

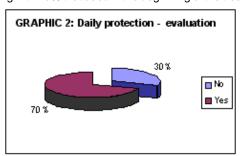
According to GRAPH 1, it was observed that 80% revealed to be a physical and mainly social problem, showing the negative impact caused by this condition and justifying the importance of its treatment.

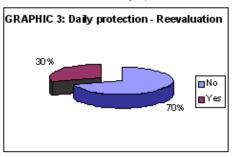


After the application of the treatment protocol observed in the methodology during ten sessions, the patients went through a new evaluation using a questionnaire and the physical examination, focusing on the result of AFA.

#### Results obtained in the reevaluation

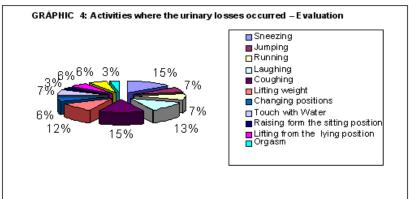
During the reevaluation, the patients were questioned about the necessity of daily protection: only 30% related still using it, contrasting with 70% that used in the beginning of the treatment, as demonstrated in graphs 2 and 3.



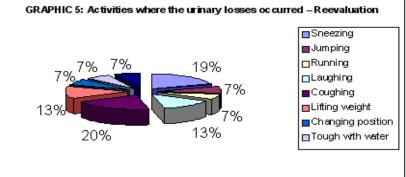


The average of daily exchanges decreased from 4 exchanges a day to 2. The test of the anus elevators strength got an average of 4,2 which means a improvement of the objective and subjective perineal function to the touching, as TABLE 1.

During the evaluation, the patients were questioned about the activities where the urinary losses occurred. The activities that presented higher occurrence were sneezing, laughing, coughing and lifting weight, and varying from 100% to 80% of the cases, as demonstrated in GRAPH 4.



After the ten initial sessions the patients were interrogated about the same activities where the urinary losses occurred. Activities like sneezing, laughing, coughing and lifting weight had continued being the most prevalent but now varying from 30 to 20% of the cases. However, some activities like raising from the sitting position, lifting from the lying position and orgasm were not mentioned as activities of urinary loss, demonstrating visible evolution of the initial conditions. These results are quantified in GRAPH 5.



To Baracat and Lima (2005), the not surgical treatment of the urinary incontinence of effort has gained importance in recent years because of the improvement of its results and the few side effects that it provokes.

The physiotherapy has created more and more techniques that allow the woman to have an efficient treatment for the cure of effort incontinence, making it possible for her to leave aside a possible surgical intervention (CORDEIRO, MEDINA E

BRANDT, 2002).

## Conclusions

The study made possible to conclude that the physiotherapeutic aid plan proposed to the sample through the transvaginal EE e kinesiotherapy demonstrated effectiveness as for the presented dysfunction.

The improvement of the condition was observed when compared to the test of anus elevators strength which presented an average of 2,2 and after 10 sessions reached an average of 4,2.

Another important parameter to be highlighted was the use of daily protections in which a 70% to 30% reduction was observed after the sessions. The average of the exchanges also suffered a decrease from 4 to twice a day.

We must also emphasize the lower percentage when observing the activities where the losses occurred in the beginning of the treatment, being 100% when sneezing, 100% while coughing, 90% while laughing and 80% while lifting weight. In the end of the treatment, theses values were modified to 30% when sneezing, 30% when coughing, 20% when laughing and 20% while lifting weight.

It can be noticed that were positive results regarding the evolution of the patients as for the physical, social and psychological aspect, enabling the improvement of their quality of life.

The conservative treatment with the physiotherapy resources which were used prevented the patient from a surgical intervention to solve the problem.

It is essential to let women know as well as the medical team that attends women with this dysfunction about the benefits of the conservative treatment for urinary incontinence.

This necessity exists in all the socioeconomic groups and all ages, thus making possible the accomplishment of a prevention work and more efficient treatment.

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### URINARY INCONTINENCE AND PHYSIOTERAPEUTIC TREATMENT: EVALUATION OF RESULTS

**Summary:** Urinary incontinence is conceptualized as every condition in which there is involuntary loss of urine, objectively demonstrable, causing social or hygienical problem to the woman. It has multifactorial cause, being a generating element of social exclusion, interfering with the patient's physical and mental health and impairing his quality of life. The present study was carried out with 10 incontinents women through techniques transvaginal eletroestimulation and specific kinesiotherapy. The results have demonstrated the effectiveness of the conservative treatment, therefore it was possible to observe the improvement of the condition through parameters you quantified, as the test of the strength of the Anus Elevators which had its average increased from 2.2 to 4.2, as well as the reduction of the use of daily protections from 4 to 2, and the reduction of loss episodes in daily activities, as sneezing, coughing, laughing and to lifting weight. Word-key: Incontinence, Physiotherapy, Treatment

## INCONTINENCE URINAIRE E TRAITEMENT AVEC PHYSIOTHÉRAPIE: ÉVALUATION DES RÉSULTATS

**Résumé:** L'incontinence urinaire est conceptuée comme toute condition dans laquelle il y a une perte involontaire d'urine, objectivement démontrée, causant des problèmes sociaux ou higiéniques à la femme. Elle a multiples facteurs de cause et est élément générateur d'exclusion sociale, tout en intervenant dans la santé physique et mental de la patiente et compromettant sa qualité de vie. Le présent étude a été realisé avec 10 femmes incontinentes à travers des techniques d'électro-stimulation transvaginal et cinésiothérapie spécifique. Les résultats ont démontré l'efficacité du traitement conservateur, observé dans l'amélioration du cadre à travers des paramètres quantifiables, comme le test de Force des Élévateurs de l'Anus (AFA) qui a eu sa moyenne élevée de 2.2 à 4.2, la diminution de l'utilisation de protections de 4 à 2 par jour, ainsi comme la réduction des épisodes de pertes aux activités quotidiènes, comme éternuer, tousser, rire et soulever du poids.

Mots-clés: Incontinence, Physiothérapie, Traitement.

## INCONTINENCIA URINARIA Y TRATAMIENTO FISIOTERAPEUTICO: EVALUACIÓN DE LOS RESULTADOS

Resumen: Incontinencia urinaria es considerada como toda condición en la cual hay perdida involuntária de orina, objetivamente demonstrada, causando problema social o higiénico a la mujer. Tiene causa multifactorial siendo elemento causador de exclusión social, interfiriendo en la salud física y mental de la paciente y comprometiendo su calidad de vida. El presente estudio fue realizado con 10 mujeres con incontinencia a través de las técnicas de electroestimulación transvaginal y cinesioterapía específica. Los resultados demonstraron la eficiencia del tratamiento, observando la mejora del cuadro a través de parametros cuantitativos, como el test de Fuerza de Elevadores del Ano (AFA) que tuvo su media elevada de 2.2 para 4.2, la disminución del uso de protecciones diárias de 4 para 2, tal como la disminución de los episódios de perdidas en actividades cotidianas, como estornudar, toser, reir y levantar peso. Palabras-llave: Incontinencia, Fisioterapia, Tratamiento.

# INCONTINÊNCIA URINÁRIA E TRATAMENTO FISIOTERAPÊUTICO: AVALIAÇÃO DOS RESULTADOS

Resumo: Incontinência urinária é conceituada como toda condição na qual há perda involuntária de urina, objetivamente demonstrável, causando problema social ou higiênico à mulher. Tem causa multifatorial sendo elemento gerador de exclusão social, interferindo na saúde física e mental da paciente e comprometendo sua qualidade de vida. O presente estudo foi realizado com 10 mulheres incontinentes através das técnicas de eletroestimulação transvaginal e cinesioterapia específica. Os resultados demonstraram a eficácia do tratamento conservador, observado na melhora do quadro através de parâmetros quantificáveis, como o teste de Força do Elevadores do Ânus (AFA) que teve sua média elevada de 2.2 para 4.2, a diminuição da utilização de proteções diárias de 4 para 2, bem como a diminuição dos episódios de perdas em atividades cotidianas, como espirrar, tossir, rir e levantar peso. Palavras-chave: Incontinência, Fisioterapia, Tratamento.