155 - EFFECTS OF COMBINED TREATMENT WITH REFLEXOLOGY CONVENTIONAL IN PATIENTS WITH PARKINSON'S DISEASE

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INTRODUCTION

Parkinson's disease is the second most prevalent between the nervous system pathologies (AARSLAND and Kurz, 2010; LAU and Breteler, 2006). According to the United Nations (UN), there are at least four million people worldwide with Parkinson's disease. It is estimated that this number will double by 2040, with the increasing elderly population.

In Brazil, there are no statistics for this disease, but it is assumed that about 255 000 people are affected by the disease in the country, making it a public health problem, especially for the elderly, who are the main affected (Teive, 2000).

Parkinson's disease is defined as a progressive neurodegenerative disorder, caused by selective loss of dopaminergic neurons located in the compacta of the substantia nigra. The loss of axons leaving the brain region that causes a lot of neurological symptoms, such as resting tremor, muscle rigidity and bradykinesia (GELB, OLIVER and GILMAN, 1999).

Currently, the recommended treatment for this disease is multidisciplinary and involves various professionals such as doctors, physiotherapists, occupational therapists, nurses, psychologists, social workers, who through their work activities collaborating with the improvement in quality of life of these patients (Ayoub and FERRIGAN, 2008).

Massage is a type of benign physical stimuli and their effect can be achieved through the reflection of the meridians and nervous system. The massage provides well-being of the nervous system especially the brain, had a positive effect of ease, improving hearing and vision. Also regulates blood flow from the brain by increasing the oxygen supply of the brain, and is effective for regulating the function of the cortex. Has characteristic effect to increase intelligence and memory in the brain.

The Reflexology is a massage technique being applied pressure to specific points of the foot and its principles as a point on each foot is connected to a specific area of the body.

According to Leonardo da Vinci "The feet are an engineering masterpiece and an artistic construction." The pressure on reflex points can cause a person to a state of complete relaxation or, instead, encourage more energy. Through these reflex stimuli, wisely nature plays its role, making the body back to find inner balance, regulating the functions of the vagus nerve (sympathetic and parasympathetic). (Matte, 2003).

Most people seeking reflexology as a treatment option is safe, effective, easily available and simple to use, for various health problems. Some are attracted by this therapy because it is noninvasive and uses no drugs. Around the world is discovering that reflexology can help treat the causes of many health problems, relieve the pressure of day-to-day and to mitigate the impact of past injuries or illnesses. It also gives the opportunity to play and help those you care about. (BARBARA, KEVIN KUNZ, 2003).

In this sense, was marked the following research problem: What is the combined effects of Reflexology with conventional treatment in patients with Parkinson's disease?

Justifies the practice of Massage Therapy, Reflexology with the technique as a therapeutic resource for the effects clinically proven and low cost in order to bring the general well-being (physical and emotional balance) bearer of Parkinson's disease.

Therefore, the aim of this study was to identify the combined effects of Reflexology with conventional treatment in patients with Parkinson's disease, and specific objectives are to recognize that the implementation of technical improvements Reflexology promotes in patients with Parkinson's disease and compare the effects of Reflexology in patients before and after application of the technique in patients with Parkinson's.

METHODS

According to Gil (2006), this study relies primarily on quantitative and descriptive and experimental. It was held in Paraná Association of People with Parkinsonism (APPP), located in Curitiba-PR, after prior authorization of the institution and the patients, who signed a consent-savvy.

This study was conducted with six patients with Parkinson's 3 males and 3 females with symptoms of Parkinson's.

For this study we used a structured questionnaire on the type of data and multiple choices for patients with Parkinson prepared by students of the Massage Therapy Technician and submitted to the collegiate Technical Course in Massage Therapy, Instituto Federal do Paraná (IFPR).

After obtaining the authorization was to initiate the process of data collection in June 2010. Data collection was as follows: patients with Parkinson answered a questionnaire after the first application of massage and Foot Reflexology 10 after application.

Patients were also interviewed at the beginning and end of the search by APPP Psychologist for a psychological assessment.

After the application of the questionnaire was conducted transfers its results to Excel 2000 for Windows Software. Since then the work was done and the implementation of appropriate statistical correlations and discussions from the findings and literature available.

RESULTS AND DISCUSSION

The results are shown in Table (1) below and the graph (1).

The primary clinical disorders present in DP consists of: tremor, rigidity, bradykinesia and postural instability (Barros et al 2006).

You can set that Reflexology as an active process that forces reclaimers of the body, inducing him to a state of homeostasis. Or, a specific technique of pressure on reflex points connected to all organs and body systems (Matte, 2003).

Research has shown, at the end of the 10th. implementation of significant improvements such as Foot Reflexology: 72% improvement movements, 70% improvement in bradykinesia, 60% improvement in upper limb tremor and 80% of the lower limbs.

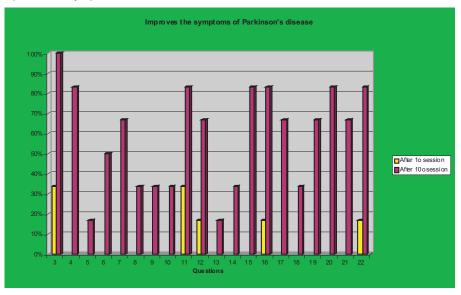
The subjects affected by PD clinical symptoms, which vary from case to case. Besides the primary symptoms characteristic social changes can be found which leads the individual to become isolated, either by their own depression, difficulty in communicating the changes will emerge in the articulation, voice, swallowing and breathing, or by cognitive and / or motor that emerge at different intensities and stages of disease (Barros et. al. 2006).

We found that patients participating in the survey had favorable responses to stimuli massage Reflexology in relation to the improvement of speech (90%) and swallowing (85%) and drooling (80%). The improved mood (78%) might have promoted the improvement of provision for leisure (76%), motivation for exercise (74%) and also easier to dress up (88%).

Table 1. Results of the questionnaire

QUESTION	AFTER SERVICE 1° REFLEXOLOGY					AFTER SERVICE 10° REFLEXOLOGY LOGIA PODAL				
	NOTHING	WELLNESS	CALI	AGITATION	OTHER	NOTHING	WELLNESS	CALM	AGITATION	OTHER
What you saw during the massage?		83%	83%				83%	83%		17%
2. What you saw after the massage?		83%	67%		17%		100%	67%		67%
	YES	NO	A	verage improvem	YES	NO	Average improvement of 10 to 0			
3. Noticed some improvement in pain after the application of massage?	33%	67%		4	100%		6,5			
Here was improvement in insomnia?		100%			83%	17%	8,0			
5. Showed some pathology after the massage?		100%				17%	83%			
6. Had improvement of constipation?		100%				50%	50%		7,3	
7. There was improvement in memory?		100%				67%	33%		6,8	
8. Showed improvement in speech?		100%				33%	67%		9,0	
Showed improvement in swallowing (dysphagia)?		100%				33%	67%		8,5	
10. There was improvement in sialorrhea (saliva excessive)?		100%				33%	67%		8,0	
11. There was improvement in the movements?	33%	67%		2,5		83%	17%	7,2		
12. Bradykinesia improved in?	17%	83%		4		67%	33%		7,0	
13. Improved upper limb tremor?		100%				17%	83%		6,0	
14. Improved the tremor of the lower limbs?		100%				33%	67%		8,0	
15. Improvement of anxiety?		100%				83%	17%		5,4	
16. Felt improvement in mood?	17%	83%		2		83%	17%		7,8	
17. Showed a decrease in spasms?		100%				67%	33%		7,0	
18. Showed improvement in calligraphy?		100%				33%	67%		6,0	
19. There was improvement in appetite?		100%				67%	33%		6,3	
20. Showed more disposition to leisure time?		100%				83%	17%		7,6	
21. There was easier to dress up?		100%				67%	33%		8,8	
22. Had more motivation to exercise?	17%	83%				83%	17%		7,4	

Grafic 1. Improves the symptoms of Parkinson's disease.



A psychological evaluation conducted by Psychologist APPP with patients participating in the research showed that there was a considerable improvement in the emotional and behavioral level, mainly related to anxiety and depression. The patients were calmer, more joyful and communicative, therefore there is improvement in social relationships and their families.

Touched upon the creativity and noticed a greater willingness to engage in physical activities and leisure.

Massage is a type of benign physical stimuli and their effect can be achieved through the reflection of the meridians and nervous system. The massage provides well-being of the nervous system especially the brain, had a positive effect of ease, improving hearing and vision. Also regulates blood flow from the brain by increasing the oxygen supply of the brain, and is effective for regulating the function of the cortex. Has characteristic effect to increase intelligence and memory in the brain. (Teruyoshi HOGA, 2002).

These findings were obtained from the 1st application of massage Reflexology, because 83% of patients responded that they felt well-being, calmness and tranquility. When the end of the 10th application, 100% said they felt well-being, 67% and 67% quiet relaxation. It was also found that 68% improvement in memory and 54% improvement in anxiety and improvement of insomnia by 80% of patients.

Although not featured in the survey questionnaire, other improvements were observed, recorded in the form of developments such as: reduction of edema in lower limbs, especially legs, improves facial expression, improves the rise and fall of the litter.

Massage can be a nurturing experience, sensory. During the process, many discover unconscious tensions, release suppressed emotions, recall events, and trying new and pleasant sensations (Davis, 1991).

CONCLUSION

Through this study we see the importance of research in alternative and complementary techniques such as Reflexology Massage, especially when dealing with patients with Parkinson's disease, as facilitators in treatment. Being a massage feature with some evidence of efficacy in the treatment of Parkinson's disease, the inclusion of touch in this study showed the combined effects of a treatment beyond those already provided by conventional treatment such as physical and psychological benefits.

It is suggested that reflexology foot massage as a therapeutic alternative is beneficial, directing therapeutic strategies to be offered to patients of Parkinson's disease and that can take an active role in controlling their symptoms, and may also be of great value, and the further studies showing the effectiveness in a larger number of patients.

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EFFECTS OF COMBINED TREATMENT WITH REFLEXOLOGY CONVENTIONAL IN PATIENTS WITH PARKINSON'S DISEASE

According to the United Nations there are at least four million people worldwide with Parkinson's disease. It is estimated that this number will double by 2040, with the increasing elderly population. This research aimed to identify the combined effects of Reflexology with conventional treatment in patients with Parkinson's disease. It was held in Paraná Association of People with Parkinsonism in the city of Curitiba-PR, Brazil, after prior authorization of the institution and 6 patients who participated in the survey. As for data collection, primarily patients with Parkinson answered a questionnaire after the first application of massage and Reflexology, after 10 days of application. The results were analyzed by Exel for Windows software and the realization of correlations and discussions from the findings and literature available. The results after every session of attendance: the patients felt well-being, calm 67%, 17% relaxation, 83% reduction in pain, 80% improvement in insomnia, 73% improvement in constipation, 68% improvement in memory; 90% improvement in speech and 85% improvement in swallowing 72% improvement in their movements, 70% improvement in bradykinesia, 78% improvement in mood and 70% reduction in spasms, 76% more disposition to leisure time, 88% more to ease dressing and 74% more motivation to exercise. It is concluded that foot reflexology can have beneficial results, combined with conventional treatment in patients suffering from Parkinson's disease, improving activities of daily living and reducing adverse reactions of other treatments.

KEYWORDS: massage, foot reflexology, Parkinson's disease.

EFFETS DES TRAITEMENT COMBINÉ AVEC REFLEXOLOGIE CONVENTIONNEL CHEZ DES PATIENTS LA MALADIE DE PARKINSON

Selon les Nations Unies il ya au moins quatre millions de personnes à travers le monde avec la maladie de Parkinson. On estime que ce chiffre devrait doubler d'ici 2040, avec l'augmentation de la population des personnes âgées. Cette recherche visait à identifier les effets combinés de la réflexologie au traitement conventionnel chez des patients atteints de la maladie de Parkinson. Il a eu lieu à Paraná Association des personnes avec maladie de Parkinson dans la ville de Curitiba-PR, Brésil, après autorisation préalable de l'institution et 6 patients qui ont participé à l'enquête. En ce qui concerne la collecte de données, principalement les patients atteints de Parkinson ont répondu à un questionnaire après la première application de massage et de réflexologie, après 10 jours d'application. Les résultats ont été analysés par Exel pour les logiciels Windows et la réalisation des corrélations et des discussions à partir des résultats et de la littérature disponible. Les résultats après chaque session de la

fréquentation: les patients se sentent bien-être, calme 67%, 17% de relaxation, réduction de 83% de la douleur, 80% d'amélioration de l'insomnie, l'amélioration de 73% de la constipation, l'amélioration de 68% dans la mémoire; amélioration de 90% dans le discours et l'amélioration de 85% à avaler 72% d'amélioration dans leurs mouvements, amélioration de 70% dans la bradykinésie, l'amélioration de 78% de l'humeur et la réduction de 70% dans les spasmes, de la disposition 76% de plus de temps de loisirs, 88% de plus à l'aise dressing et la motivation 74% de plus à l'exercice. Il est conclu que la réflexologie plantaire peut avoir des résultats bénéfiques, combiné avec un traitement conventionnel chez des patients atteints de la maladie de Parkinson, l'amélioration des activités de la vie quotidienne et de réduire les effets indésirables d'autres traitements.

MOTS-CLÉS: massage, réflexologie plantaire, la maladie de Parkinson.

EFECTOS DEL TRATAMIENTO COMBINADO CON REFLEXOLOGÍA CONVENCIONALES EN PACIENTES CON ENFERMEDAD DE PARKINSON

Según las Naciones Unidas hay por lo menos cuatro millones de personas en todo el mundo con la enfermedad de Parkinson. Se estima que este número se duplicará para el año 2040, con la población anciana en aumento. Esta investigación tuvo como objetivo identificar los efectos combinados de reflexología con el tratamiento convencional en pacientes con enfermedad de Parkinson. Se realizó en Paraná la Asociación de Personas con Parkinson de la ciudad de Curitiba-PR, Brasil, previa autorización de la institución y 6 pacientes que participaron en la encuesta. En cuanto a la recogida de datos, los pacientes con Parkinson respondieron a un cuestionario después de la primera aplicación de masajes y reflexología, después de 10 días de aplicación. Los resultados fueron analizados por Exel para el software de Windows y la realización de las correlaciones y los debates de las conclusiones y la bibliografía disponible. Los resultados después de cada período de sesiones de la asistencia: los pacientes se sentían bienestar, calma el 67%, 17% de relajación, el 83% de reducción en el dolor, el 80% de mejora en el insomnio, el 73% de mejoría en el estreñimiento, el 68% de mejora en la memoria; 90% de mejoría en el habla y el 85% de mejora en la deglución 72% de mejoría en sus movimientos, el 70% de mejora en la bradicinesia, la mejora de 78% en el estado de ánimo y el 70% de reducción en los espasmos, la disposición del 76% más de tiempo libre, 88% más para facilitar vestir y la motivación del 74% más que haga ejercicio. Se concluye que la reflexología podal puede tener resultados beneficiosos, en combinación con el tratamiento convencional en pacientes con enfermedad de Parkinson, la mejora de las actividades de la vida diaria y reducir las reacciones adversas de otros tratamientos.

PALABRAS CLAVE: masaje, reflexología podal, la enfermedad de Parkinson.

EFEITOS COMBINADOS DA REFLEXOLOGIA PODAL COM O TRATAMENTO CONVENCIONAL NOS PACIENTES PORTADORES DA DOENÇA DE PARKINSON

De acordo com a Organização das Nações Unidas existem pelo menos quatro milhões de pessoas no mundo com doença de Parkinson. A estimativa é que esse número dobre até 2040, com o aumento da população idosa. Esta pesquisa objetivou identificar os efeitos combinados da Reflexologia Podal com o tratamento convencional nos pacientes portadores da Doença de Parkinson. Foi realizado na Associação Paranaense dos Portadores de Parkinsonismo localizado na cidade de Curitiba-PR-Brasil, após prévia autorização da instituição e dos 6 pacientes que participaram da pesquisa. Quanto a coleta de dados, primeiramente os pacientes portadores de Parkinson responderam um questionário após a primeira aplicação da massagem Reflexologia Podal e, após a 10º dia de aplicação. Os resultados foram analisados através de software Exel for Windows e a realização de correlações e discussões a partir dos dados encontrados e de literatura disponível. Os resultados após todas as sessões de antendimento: dos pacientes sentiram bem-estar, 67% calma, 17% relaxamento; 83% diminuição das dores, 80% melhora da insônia; 73% melhora da constipação intestinal; 68% de melhora da memória; 90% melhora da fala; 85% melhora na deglutição; 72% melhora nos movimentos; 70% melhora na bradicinesia; 78% melhora no humor; 70% milhora dos espasmos; 76% mais disposição para momentos de lazer; 88% mais facilidade para vestir-se e 74% mais motivação para exercitar-se. Conclui-se que a reflexologia podal pode apresentar resultados benéficos, combinados com o tratamento convencional em pacientes portadores da doença de Parkinson, melhorando atividades de vida diária e diminuindo reações adversas de outros tratamentos.

PALAVRAS-CHAVE: massagem; reflexologia podal; doença de Parkinson.