

59 - EVALUATION OF LEVEL OF INDIVIDUALS WITH PHYSICAL DISABILITY AFTER-EFFECTS OF LEPROSY WHICH LIE IN ATTENDANCE IN PHYSICAL REHABILITATION CENTER

MARCELO TAGLIETTI
 CELEIDE PINTO AGUIAR PERES
 Faculdade Assis Gurgacz – FAG – Cascavel - Brasil
 mtaglietti@fag.edu.br

INTRODUCTION

Leprosy is endemic in Brazil and constitutes a serious public health problem by causing permanent physical disability and have high endemic levels with distribution varied in different regions, factors that create difficulties for its epidemiological control (BRAZIL, 2005).

Leprosy is a chronic infectious process in nature, triggered by the interaction of humans with *Mycobacterium leprae* which has affinity for cells of human skin and peripheral nerves, with the primary target Schwann cells (Campos et al., 2005; Ribeiro et al., 2007; MARQUES; MOREIRA; ALMEIDA, 2003).

Physical disabilities presented these individuals are classified into three grades. The grade 0 refers to the absence of physical disability (when there is neural involvement in the eyes, hands and feet). The level 1 refers to the presence of failure (when there is only decrease or loss of sensation in the eyes, hands and / or feet). The level 2 refers to the presence of deformity and disability (the eye is reflected in lagophthalmos and / or ectropion, trichiasis, corneal opacity, visual acuity less than 0.1 or when the patient does not count fingers of the examiner to 6 meters distance; hands and feet correspond to ulcerations and / or traumatic, claws, bone resorption, "hand or foot fallen" or ankle contracture) (BRAZIL, 2008).

Estimates suggest that approximately two to three million individuals have some degree of physical impairment as a result of this disease. Studies also show that about 20% of individuals with leprosy or treated for leprosy can present physical disabilities and psychosocial restrictions, they often need some kind of intervention in rehabilitation and / or continuity of care (DEEPAK, 2003). In Brazil, approximately 23% of individuals with leprosy have some type of disability after discharge (BRAZIL, 2005).

Contextualize the individual who is in rehabilitative care is part of the routine physical therapists nationwide. The evaluation of the degree of disability should be included in the list of reviews of leprosy patients. Through this, the objective of this study was to evaluate and classify the degree of disability of individuals who are in physical rehabilitation.

DEVELOPMENT

This is a cross-sectional quantitative, aiming to assess the degree of physical disability in individuals with leprosy according to Protocol of the Ministry of Health.

Inclusion criteria were: Individuals with leprosy sequelae; Being serviced in Physiotherapy Clinic UNIOESTE; Aged between 18 and 70 years, both sexes, regardless of whether the first or the last query, time of diagnosis, complaints or pain, presence or absence of physical disabilities, and if present, regardless of its severity.

The study was conducted with individuals of Physiotherapy Clinic UNIOESTE. Through visiting Physiotherapy Clinic, 30 individuals were invited to participate in the study voluntarily and were informed of the same goals, procedures, and signed a consent form. Agreed to participate in the study 20 subjects. The project was reviewed and approved by the Ethics in Human Beings in the opinion of Unioeste number 412/2011.

Physical examination and assessment of the degree of disability of the individual were performed according to the criteria of the Ministry of Health (BRAZIL, 2002), evaluating the upper limbs, lower limbs and face. Members were inspected and palpated. We measured muscle strength across the range of MRC (Medical Research Concil) and joint mobility, and palpated the logs corresponding to the peripheral nerves of the limbs. Finally, the sensitivity of performed tests eyes, arms and legs. To this end, we used a set of extensiometer Semmes-Weinstein monofilaments six Brand Smiles, a plastic card approximately 25X35cm to obstruction of vision of the individual sensory during testing; Snellen chart for assessment of visual acuity, wire Dental soft, tasteless, measuring 5cm in length, pens markers (green, blue, violet, red and black), according to the legend of monofilament and a ballpoint pen for recording the data collected.

Data were initially analyzed using descriptive statistics. Statistical analysis was performed using Minitab version 15.

RESULTS

The sample was composed of 20 individuals, 15 (75%) were male. Anthropometric data showed a mean age of 57.2 ± 12 years, mean weight of 73.3 ± 6 kg and average height of 1.68 ± 0.1 m. According to the classification of the degree of disability by the Ministry of Health, 15 (75%) subjects had grade 1 and five (25%) individuals disability grade 2.

According to the physical examination that assessed the neural functions and its complications, met impairment in subjects related to face, palpation of the nerves of the arms and legs, strength of upper and lower limbs and also the sensitivity of the hands and feet individuals.

Neuropathy is a treat leprosy that accompanies all forms of the disease, with signs and symptoms of more or less evidence on each one (Raphael, 2009). In all forms of leprosy bacillus occurs in the presence of nerves, which is housed in the Schwann cells in both myelinated axons as amielinizados. These phenomena are not promoting inflammatory demyelination early and may occur even before the body perceive the presence of bacilli, being called parasitização (Freitas, 2003).

With the evolution of the neural disease is exacerbated by pain and thickening of peripheral nerves, loss of sensation in the areas innervated by these nerves, especially in the eyes, hands and feet, and loss of strength in the muscles innervated by these nerves mainly in eyelid and upper and lower limbs (BRAZIL, 2002).

These changes are evident in the sample, where he met physical disability 1 in 75% of individuals who match the changes in strength and sensitivity of both upper limbs in those legs. Chronic diseases like diabetes mellitus, syringomyelia, injuries or chronic diseases of the peripheral nerves as chronic alcoholism also show these findings (BRAZIL, 2008).

When the neural damage is not treated can cause disability and deformity by abnormal sensitivity in areas innervated by nerves affected (BRAZIL, 2002). Such information is correlated with the other individuals (25%) having two degree of disability in the study.

CONCLUSIONS

We conclude that in this sample of individuals with leprosy sequelae characterized with physical disability grades 1 and 2 and that meet the assumptions findings with the Ministry of Health

REFERENCES

- BRASIL. Ministério da Saúde. Departamento Nacional de Saúde. Serviço Nacional de Lepra. Manual de Leprologia. Rio de Janeiro: s.n., 171 p. 2002.
- BRASIL. Ministério da Saúde. Guia de vigilância epidemiológica. 6. ed. Brasília, 2005.
- BRASIL. MS/SVS/DVE. Cadernos de prevenção e reabilitação em hanseníase. 3. ed. Brasília: Ministério da Saúde, 2008.
- BRASIL. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância Epidemiológica. Manual de condutas para tratamento de úlceras em hanseníase e diabetes. 2. ed., rev. e ampl. – Brasília : Ministério da Saúde, 2008.
- CAMPOS, S.S.L.; RAMOS A.N.; KERRPONTES L.R.S. et al. Epidemiologia da hanseníase no Município de Sobral, Estado do Ceará-Brasil, no Período de 1997 a 2003. *Hansenologia Internationalis*. v.30, n.2, p.167-173, 2005.
- DEEPAK, S. Answering the rehabilitation needs of leprosy affected persons in integrated setting through primary health care services and community based rehabilitation. *Indian J Lepr.* v.75, n.2, p.127-42, 2003.
- FREITAS M.R.G. et al.. Small-fiber polyneuropathy in leprosy without skin changes: study of 17 cases. *Arquivos de Neuropsiquiatria*, São Paulo, v.61, n.3, p.542-546, set., 2003.

ContactAddress:

Marcelo Taglietti, Faculdade Assis Gurgacz
Curso de Fisioterapia, Avenida das Torres 500,
Loteamento FAG, Cascavel – PR – Brasil
Fone/Fax: 45 33213900, E-mail: celoexcer@yahoo.com.br

EVALUATION OF LEVEL OF INDIVIDUALS WITH PHYSICAL DISABILITY AFTER-EFFECTS OF LEPROSY WHICH LIE IN ATTENDANCE IN PHYSICAL REHABILITATION CENTER

ABSTRACT

Introduction: Estimates suggest that approximately 20% of patients treated for leprosy or Hansen's disease may present physical disabilities and psychosocial restrictions, they often need some kind of intervention with rehabilitation and / or continuity of care. In Brazil, approximately 23% of leprosy patients have some type of physical disability after discharge. **Objective:** The aim of this study was to evaluate the degree of disability of individuals with leprosy sequelae that are in physical rehabilitation. **Methodology:** This is a cross-sectional study with 20 individuals diagnosed with leprosy who are in rehabilitation physiotherapy clinic in UNIOESTE. Sensory evaluation was performed and followed by sensitive tests of muscle strength, inspection and palpation of peripheral nerve trunks of upper and lower limbs, and face assessment according to the criteria of the Ministry of Health. **Results:** In this study, individuals with sequelae leprosy had mostly physical disability 1, followed by physical disability 2. The percentage presented with grade 1 (75%) and grade 2 (25%). There were no patients with grade 0 of disability research. **Conclusion:** According to our sample, most individuals with leprosy sequelae have grade 1 disability.

KEYWORDS: Leprosy, Physical Disability, Rehabilitation

EVALUATION DU NIVEAU DES PERSONNES AVEC HANDICAP PHYSIQUE SÉQUELLES DE LA LÉPRA QUI SE TROUVENT DANS PARTICIPATION DANS LE CENTRE DE RÉADAPTATION PHYSIQUE

RESUME

Introduction: On estime qu'environ 20% des patients traités pour la maladie de la lèpre ou de Hansen peuvent présenter des handicaps physiques et psychosociaux des restrictions, ils ont souvent besoin d'une certaine forme d'intervention de réadaptation et / ou la continuité des soins. Au Brésil, environ 23% des malades de la lèpre ont un certain type d'incapacité physique après le congé. **Objectif:** Le but de cette étude était d'évaluer le degré d'invalidité des personnes atteintes de la lèpre séquelles qui sont en réadaptation physique. **Méthodologie:** Il s'agit d'une étude transversale avec 20 personnes atteintes de la lèpre qui se trouvent dans une clinique de physiothérapie de réadaptation dans UNIOESTE. L'évaluation sensorielle a été réalisée et suivie par des tests sensibles de la force musculaire, l'inspection et la palpation des troncs nerveux périphériques des membres supérieurs et inférieurs, et l'évaluation de visage selon les critères du ministère de la santé. **Résultats:** Dans cette étude, les individus avec des suites lèpre avait handicap physique la plupart du temps 1, puis 2 handicap physique. Le pourcentage présenté avec le grade 1 (75%) et de grade 2 (25%). Il n'y avait aucune patients atteints de grade 0 de recherche sur l'invalidité. **Conclusion:** Selon notre échantillon, la plupart des personnes atteintes de la lèpre ont séquelles de grade 1 invalidité.

MOTS-CLÉS: la lèpre, Incapacité physique, de réadaptation

EVALUACIÓN DEL NIVEL DE LAS PERSONAS CON DISCAPACIDAD FÍSICA SECUELAS DE LEpra QUE MIENDE EN ASISTENCIA EN EL CENTRO DE REHABILITACION FISICA

RESUMEN

Introducción: Las estimaciones sugieren que aproximadamente el 20% de los pacientes tratados para la enfermedad de la lepra o de Hansen pueden presentar discapacidades físicas y restricciones psicosociales, a menudo es necesario algún tipo de intervención en la rehabilitación y / o continuidad de la atención. En Brasil, aproximadamente el 23% de los enfermos de lepra tienen algún tipo de discapacidad física después del alta. **Objetivo:** El objetivo de este estudio fue evaluar el grado de discapacidad de las personas con lepra secuelas que están en rehabilitación física. **Metodología:** Es un estudio transversal con 20 personas con diagnóstico de lepra que se encuentran en la clínica de rehabilitación de fisioterapia en UNIOESTE. La evaluación sensorial se realizó y seguido de pruebas sensibles de la fuerza muscular, la inspección y la palpación de los troncos nerviosos periféricos de las extremidades superiores e inferiores, cara y evaluación de acuerdo con los criterios del Ministerio de Salud. **Resultados:** En este estudio, los individuos con secuelas lepra tenían discapacidad física principalmente 1, seguido por 2 discapacidad física. El porcentaje presentado con grado 1 (75%) y de grado 2 (25%). No había pacientes con grado 0 de la investigación discapacidad. **Conclusión:** En nuestra muestra, la mayoría de las personas con lepra secuelas tienen una discapacidad de grado.

PALABRAS CLAVE: Lepra, de la Discapacidad Física Rehabilitación

AVALIAÇÃO DO GRAU DE INCAPACIDADE FÍSICA DE INDIVÍDUOS COM SEQUELAS DE HANSENÍASE QUE ENCONTRAM-SE EM ATENDIMENTO EM CENTRO DE REABILITAÇÃO FÍSICA**RESUMO**

Introdução: Estimativas sugerem que cerca de 20% dos pacientes com hanseníase ou tratados para hanseníase podem apresentar incapacidades físicas e restrições psicossociais, chegando a necessitar de algum tipo de intervenção com reabilitação e/ou continuidade dos cuidados médicos. No Brasil, aproximadamente 23% dos pacientes com hanseníase apresentam algum tipo de incapacidade física após a alta. Objetivo: O objetivo desse estudo foi avaliar o grau de incapacidade física de indivíduos com seqüelas de hanseníase que encontram-se em reabilitação física. Metodologia: Este é um estudo transversal com 20 indivíduos com diagnóstico de hanseníase que se encontram em reabilitação na clínica de fisioterapia da UNIOESTE. Foi realizada avaliação sensorial e sensitiva seguida de testes de força muscular, inspeção e palpação de troncos de nervos periféricos de membros superiores e inferiores, além de avaliação da face de acordo com os critérios do Ministério da Saúde. Resultados: Neste estudo, indivíduos com seqüelas de hanseníase apresentaram na sua maioria grau de incapacidade física 1, seguido de incapacidade física 2. A porcentagem apresentou-se com grau 1 (75%) e grau 2 (25%). Não houve indivíduos com grau 0 de incapacidade física na pesquisa. Conclusão: De acordo com a amostra estudada, a maioria dos indivíduos com seqüelas de hanseníase apresentam grau 1 de incapacidade física.

PALAVRAS-CHAVE: Hanseníase, Incapacidade Física, Reabilitação