

109 - FUNCTIONAL CAPACITY AND QUALITY OF LIFE IN PATIENTS WITH VASCULAR BRAIN INJURY

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INTRODUCTION

According to the Ministry of Health in Brazil in 2007, including cardiovascular disease cerebrovascular disease ranked first in mortality. The main form of cerebrovascular disease is stroke (CVA) can be character ischemic or hemorrhagic, with a significant amount from 40 years of age and with worse prognosis from 65. This neurological disease is a major cause of hospitalization and mortality, resulting in approximately 90% of survivors, some kind of disability, either partial or total. (BOCCHI, 2005, and CARVALHO, 2004).

Its causes are related to the reduction of blood flow due to partial or complete occlusion of a cerebral artery, and the formation of a cerebral infarction is caused by the sudden appearance of a deficit, featuring ischemic stroke, or rupture of a vessel leading to extravasation of blood characterize the hemorrhagic stroke, so the sequelae will be connected with the extension and brain damage (O'SULLIVAN, SCHMITZ, 2004).

The destruction of brain areas is followed by signs and symptoms related to the change in motor activity and, soon after this injury, start-up and recovery mechanisms of several stages that can last for months. Repair happens with the gradual return of function, but this does not mean the return of the same mechanisms engines lost after injury, but an adaptation of the residual mechanisms, characteristic of neuronal plasticity (VILLAR, 1997).

Several deficits are possible, including damage to the motor, sensory, mental, perceptual and language. Motor deficiencies are characterized by paralysis (hemiplegia) or weakness (hemiparesis) on the side of the body opposite the site of brain injury. The AVE's vary from mild to severe, and the consequences can be temporary or permanent (RYERSON, 2004).

The Barthel Index is a tool that assesses the level of independence of the subject to perform ten basic activities of life: food, personal hygiene, using the toilet, bathing, dressing and undressing, sphincter control, walking, going up and down stairs, use of wheelchair, transfer from the wheelchair to the bed. In the original version of the score scale ranges from 0-100 (with intervals of 5 points). Where the minimum score of zero corresponds to maximum dependency for all ADLs evaluated, and the maximum of one hundred points equals total independence for the same ADL. Since its publication that the IB has been widely used in order to quantify and monitor the (in) dependence of individuals (MAHONEY and BARTHEL 1965).

According to the World Health Organization (WHO), the quality of life can be defined as the individual's perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. This definition is understood that the concept of quality of life is subjective, multidimensional and includes elements of both positive and negative evaluation (LOUZADA and SANTOS, 1999). The quality of life questionnaire SF-36 has been translated and validated in Brazil by Ciconelli, is the most used because it is a generic instrument for assessing quality of life, not specific to a certain age, disease or treatment group (CICONELLI, 1999).

Thus, the study aims to relate the results of the questionnaires with their possible interference in the overall functionality and quality of life of individuals affected by stroke.

METHODOLOGY

This is a study of characteristic quantitative, qualitative, epidemiological, which aims to identify the quality of life and (in) dependence of patients with a diagnosis of stroke in physical therapy at the Clinic for Rehabilitation of FAG and began soon after approval of the ethics Committee.

As inclusion criteria, patients affected by ischemic or hemorrhagic stroke should be in physical therapy in the period July to September 2013, with men and women of different ages.

The exclusion criteria, patients who did not establish communication and were not accompanied by a caregiver or family member who knew Providing accurate information would not be questioned; patients who have not committed to sign the Instrument of Consent (IC), as well as patients who submit limb amputations upper and / or lower limb or other neurological pathology associated estriam that interfering in the results of the questionnaires.

Based on the criteria adopted, two questionnaires were applied individually to the eleven patients, the Barthel Index (BI) and the Quality of Life Questionnaire SF-36. The IB consists of activities of daily living, which are scored and at the end the sum is performed, ranging from 0 to 100 where a hundred is the highest score indicating full independence. The quality of life questionnaire SF-36 is composed of 36 questions, the survey results are found by dividing the issues into eight domains: physical functioning, role limitations due to physical, bodily pain, general health, vitality, social functioning, limitations due to emotional and mental health; values of each domain can not be added to then result in an average. To find the value in each domain is performed Raw Scale. The score ranges from zero to one hundred, or closer to one hundred better quality of life. Question number 2 is not part of any domain calculations, being used only to assess how the individual is better or worse in relation to current health compared to a year ago. The exhibition of the results obtained from the questionnaires is in the form of tables, relating them to the ideas of the authors surveyed.

RESULTS

With the application of the Barthel Index was possible to grade the dependence of the individual in their daily activities. Thus, the table 01 is presented to classify patients as the degree of dependence in activities of hygiene, nutrition, personal care, sphincter control, ambulation, transfer and transportation with wheelchair.

According to the data obtained, it is observed that all patients interviewed have certain dependence, which is due to the onset of stroke. It was also possible to identify which patients have different degrees of dependency vary with the area and extent of brain damage, treatment time and the presence of recurrent stroke or not.

Table 01 - Dependence of stroke patients through the application of the Barthel Index

Score	Number of patients
100 points - totally independent	-----
99-76 points - mild dependence	4 patients
75-51 points - moderate dependence	3 patients
50-26 points - severe dependence	4 patients
25 and minus points - total dependence	-----

Based on data collected with the patients, Table 02 shows the average in each domain according to the classification of patients by IB. We found that even in different degrees of dependence, the domains physical functioning, role limitations due to physical pain and limitations due to emotional, are those with a lower score indicating poor quality of life in relation to them.

Table 02 - Relationship between quality of life according to the degree of dependence of patients with stroke

Domains	Patients with mild dependence	Patients with moderate dependence	Patients with severe dependence
Functional capacity	28.75	15	27.5
Limitation by aspects physical	25	0	12.5
Pain	44.75	41	51.75
General health	71	64	67
Vitality	80	65	83.75
Social Aspects	87.5	42.5	71.87
Limitations due to emotional	8.32	0	25
Mental health	73	76	71

DISCUSSION

Campos et al (2011) showed in their study by applying the Barthel Index, the relevance of subjects with moderate dependence, which differs from the present study, where the moderate dependence did not show a greater number of individuals. However, the dependency is due to factors such as age, duration of treatment, length of stroke, the area and extent of brain involvement.

With the implementation of the Quality of Life questionnaire SF-36, we found that patients affected by stroke had significantly lower scores in functional capacity (score ≤ 28.75), limitation by aspects physical (score ≤ 25), pain (score ≤ 51.75) and limitations due to emotional (score ≤ 25), indicating poor quality of life associated with functional dependence, as in the study of Scalzo et al (2010) which assessed subjects had lower scores in the domains role limitations due to physical and functional capacity.

In the study by Cesario, Penasso and Oliveira (2006), the results obtained in relation to quality of life were similar to this study, indicating low scores in the same domains: physical functioning, bodily pain, role limitations due to physical and emotional aspects. Pain is a hallmark of this disease, it occurs in the affected hemisphere, particularly the shoulder, causing patients to limit the activities of daily living. The disuse due to pain and difficulty in performing movements due to disability, making the individual more dependent in their ADLs, thus affecting your emotional.

CONCLUSION

It can be concluded with this study, which according to the data from the questionnaires, this neurologic disease negatively affects the lives of patients affected, causing cognitive and functional deficits that result in a poor quality of life. Further studies are needed to address the relationship of stroke with functional disability and use of indices and scales. However, the literature reports that the operated stroke is limiting and debilitating neurological pathology, which greatly affects quality of life and that by means of standard methods results are obtained by providing the intervention of adequately treating.

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ABSTRACT

Objective: Stroke (CVA) is a disabling neurological disease that can be hemorrhagic or ischemic region and undertake a greater or lesser brain, causing different symptoms each patient. The main clinical sign is hemiplegia, which is the commitment of one side of the body formed by motor, sensory and cognitive. By causing deficits to the individual, the AVE leaves the patient partially or totally dependent in their activities of daily living (ADLs), this dependence that affects the quality of life (QOL) of the same. By applying the Barthel Index (BI) can score the functional dependence of the individual. In addition to identifying functional impairment, standardized questionnaires are used to assess the impact of the disease, such as quality of life questionnaire SF -36. The present study aims to quantify the level of functional capacity and quality of life interference in eleven patients affected by stroke. **Methodology:** Study of a quantitative, qualitative and epidemiological conducted at Rehabilitation FAG with the population affected by stroke in the period from July to September, which was applied to the Barthel Index and quality of life questionnaire SF - 36 and the results were exposed in the form of simple graphic. **Results:** patients affected by stroke showed some degree of dependence on their ADLs associated with a poor quality of life. **Conclusion:** It was concluded in this study that this neurologic disease negatively affects the lives of individuals affected , causing functional and cognitive deficits that lead to poor quality of life . However , there are few studies that address the relationship of stroke with functional disability and use of indices and scales .

KEYWORDS: Stroke, Disability, Barthel Index, quality of life questionnaire SF -36 .

LA CAPACITÉ FONCTIONNELLE ET QUALITÉ DE VIE DANS PATIENTS PRÉSENTANT UNE LÉSION VASCULAIRE CÉRÉBRAL

RÉSUMÉ

Objectif: Accident vasculaire cérébral (AVC) est une maladie neurologique invalidante qui peut être la région hémorragique ou ischémique et d'entreprendre un cerveau plus ou moins, ce qui provoque des symptômes différents chaque patient. Le principal signe clinique est une hémiplégie, qui est l'engagement d'un côté du corps formé par le moteur, sensoriel et cognitif. En provoquant des déficits à l'individu, l' AVE laisse le patient partiellement ou totalement dépendants dans leurs activités de la vie quotidienne (AVQ), cette dépendance qui affecte la qualité de vie (QOL) de la même. En appliquant l'indice de Barthel (BI) peut marquer la dépendance fonctionnelle de l'individu. En plus d'identifier une déficience fonctionnelle, des questionnaires standardisés sont utilisés pour évaluer l'impact de la maladie, comme le questionnaire de qualité de vie SF- 36. La présente étude vise à quantifier le niveau de capacité fonctionnelle et la qualité de l'ingérence de vie dans onze patients victimes d'un AVC. **Méthodologie:** Etude d'une quantitative, qualitative et épidémiologique menée à la réhabilitation FAG avec la population touchée par un AVC dans la période de Juillet à Septembre, qui a été appliquée à l'indice de Barthel et questionnaire de qualité de vie SF- 36 et les résultats ont été exposés sous forme de graphique simple. **Résultats:** les patients victimes d'un AVC ont montré un certain degré de dépendance à l'égard de leurs AVQ associés à une mauvaise qualité de vie. **Conclusion:** Il a été conclu dans cette étude que cette maladie neurologique affecte négativement la vie des personnes touchées, entraînant des déficits fonctionnels et cognitifs qui conduisent à une mauvaise qualité de vie. Cependant, il existe peu d'études portant sur le lien de la course avec handicap fonctionnel et l'utilisation des indices et des échelles.

MOTS-CLÉS: course, du handicap, Index Barthel, la qualité de vie questionnaire SF- 36.

CAPACIDAD FUNCIONAL Y CALIDAD DE VIDA EN PACIENTES CON LESIÓN CEREBRAL VASCULAR

RESUMEN

Objetivo: accidente cerebrovascular (ACV) es una enfermedad neurológica incapacitante que puede ser región hemorrágica o isquémica y llevar a cabo un mayor o menor cerebro, causando diversos síntomas que cada paciente. El signo clínico principal es hemiplejía , que es el compromiso de un lado del cuerpo formado por el motor, sensorial y cognitiva. Al causar déficits para el individuo, el AVE deja al paciente parcial o totalmente dependiente en sus actividades de la vida diaria (AVD), esta dependencia que afecta a la calidad de vida (QOL) de la misma. Mediante la aplicación del Índice de Barthel (BI) puede marcar la dependencia funcional de la persona. Además de identificar el deterioro funcional, cuestionarios estandarizados se utilizan para evaluar el impacto de la enfermedad, como de calidad de vida SF- 36. El presente estudio tiene como objetivo cuantificar el nivel de la capacidad funcional y la calidad de vida de la interferencia en once pacientes afectados por un derrame cerebral. **Metodología:** Estudio de un análisis cuantitativo, cualitativo y epidemiológico realizado en Rehabilitación FAG con la población afectada por el accidente cerebrovascular en el período de julio a septiembre, que se aplicó el Índice de Barthel y el cuestionario de calidad de vida SF -36 y los resultados fueron expuestos en forma de gráfico simple. **Resultados:** Los pacientes afectados por ictus mostraron algún grado de dependencia en sus actividades cotidianas asociadas con una mala calidad de vida. **Conclusión:** Se concluye en este estudio que esta enfermedad neurológica afecta negativamente a la vida de las personas afectadas , causando déficits funcionales y cognitivos que conducen a la mala calidad de vida. Sin embargo, son pocos los estudios que abordan la relación de tiempos con discapacidad funcional y el uso de índices y escalas.

PALABRAS CLAVE: accidente cerebrovascular, discapacidad, índice de Barthel, la calidad de vida SF- 36.

CAPACIDADE FUNCIONAL E QUALIDADE DE VIDA DE PACIENTES COM ACIDENTE VASCULAR ENCEFÁLICO**RESUMO**

Objetivo: O acidente vascular encefálico (AVE) é uma patologia neurológica incapacitante que pode ser hemorrágico ou isquêmico e acometer uma região maior ou menor do encéfalo, ocasionando sintomas diferentes a cada paciente. O principal sinal clínico é a hemiplegia, que é o comprometimento de um lado do corpo formada por déficits motores, sensitivos e cognitivos. Por causar déficits ao indivíduo, o AVE deixa o paciente parcial ou totalmente dependente nas suas atividades de vida diária (AVD's), dependência essa que afeta a qualidade de vida (QV) do mesmo. Por meio da aplicação do Índice de Barthel (IB) pode-se pontuar o grau de dependência funcional do indivíduo. Além de identificar o comprometimento funcional, são utilizados questionários padronizados para avaliar o impacto da doença, como o Questionário de qualidade de vida SF-36. O presente estudo, tem como objetivo quantificar o nível de capacidade funcional e a interferência na qualidade de vida de onze pacientes acometidos pelo AVE. Metodologia: Estudo de caráter quantitativo, qualitativo e epidemiológico realizado na Clínica de Reabilitação da FAG com a população acometida por AVE no período de julho a setembro, onde foi aplicado o Índice de Barthel e Questionário de qualidade de vida SF-36 e os resultados obtidos foram expostos em forma de gráfico simples. Resultados: os pacientes acometidos pelo AVE apresentaram algum grau de dependência nas suas AVD's associada a uma má qualidade de vida. Conclusão: Pode-se concluir com o presente estudo, que esta patologia neurológica afeta de forma negativa a vida dos indivíduos acometidos, causando déficits funcionais e cognitivos que levam à má qualidade de vida. Contudo, ainda são poucos estudos que abordam a relação do acidente vascular encefálico com a incapacidade funcional e aplicação de índices e escalas.

PALAVRAS-CHAVE: Acidente vascular encefálico, Incapacidade funcional, Índice de Barthel, Questionário de qualidade de vida SF-36.