147 - FACTORS AFFECTING THE FUNCTIONAL INDEPENDENCE OF PATIENTS AMPUTEES TRANSFEMORAL PROSTHESES

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INTRODUCTION

According to Carvalho (2003) amputation is a word derived from the Latin, means a partial or total withdrawal of a member or more, may be surgical or traumatic. As for transfemoral amputation refers to amputations between the disarticulation of the hip and the knee, which can be divided into proximal, mid and distal ends.

The remaining part of the amputated limb stump is called and its main purpose is to anchor the prosthesis, which is used to replace lost or malformed region of the body. Certain complications are common with the stump, as flexion deformity, painful neuromas, skin complications, vascular compromise, bone irregularities and excess soft tissue (ABDALLAH, 2010).

The rehabilitation process for amputees enables the restoration of functionality through improved mobility and ability to perform the activities of daily life and practice, providing quality of life (Antunes, 2010).

To determine whether the objectives of the proposed treatments were achieved functional assessment is necessary and to evaluate this functionality was developed in Scotland in the questionnaire "Functional Measure for Amputees" (FMA) (KAGEYAMA, 2007).

Kageyama produced in his dissertation in 2007, the version of the FMA transcultural into Portuguese, as in Brazil there was no instrument developed or translated specifically for the evaluation of patients with lower limb amputation.

Through the results of his dissertation, the author showed that the Brazilian version of the FMA, called Quiz "Functional Measure for Amputees", can be a useful tool to assist in measuring outcomes of physiotherapy treatment and also to identify the functional limitations that need to be worked.

This study aimed to identify the factors that affect the level of functional independence of patients transfemoral prostheses Rehabilitation Center Gurgacz Assisi.

METHODOLOGY

The research is in a field study of epidemiologic and evaluative, quantitative cross-sectional. The study population is the level amputees with unilateral transfemoral prosthesis for more than six months, and in the age group between 19-78 years.

The sample consisted of 12 individuals. Inclusion criteria were patients with transfemoral amputation level, men and women, aged 19-78 years who use denture more than six months. Be excluded from participation in the research subjects with difficulty understanding the questionnaire, under the age of 18 years and over 79 years, or who do not contemplate the inclusion criteria.

The study was approved by the Ethics and Research FAG Nº020/2013 and the participants or guardians signed the consent form.

Data collection was conducted from June to July 2013, which was explained to the participant about the research and handed a term sheet free and clear, in which the participant claimed to have been duly informed of the research objectives agreed to participate voluntarily in the same, after amputees have undergone an evaluation, which answered questions prepared by the researcher and soon after the evaluation of the amputation stump. The evaluation form includes data such as age, sex, cause of amputation, time of use of the prosthesis, amputation level. In assessing the possible changes were observed stump tactile sensitivity, skin lesions, edema, healing, cushion terminal and if there is existence of contractures.

The examiner positioned the patient sitting comfortably, after the region was inspected the stump, verifying the presence of skin lesions, considering all the bruises, cracks, wound open and darkening in the region of the stump.

Remaining seated, there were cirtometry to verify the presence of edema, being used as a reference tape measure and 15, 20 and 30 cm below the greater trochanter, these measurements were compared to the intact limb to see an increase in circumference the stump. It is considered edema when the three steps of the stump were higher than the same measurements member integrate, in addition, held as inspection and palpation positive edema.

After we observed the integrity of healing, if there is a normal scar with adhesions, invaginated or unhealed for this evaluation, the patient remained seated comfortably.

Tactile sensitivity was tested with the patient in the supine position, where the examiner with the help of the brush come full extent of scarring and cushion terminal looking for a change of sensitivity, the patient reported with closed eyes the kind of feeling that I was sense, the test was carried out member and also compared to intact feeling between them. Considered reduced sensitivity when the patient reported feeling less sensation in the stump when compared to the normal limb and increased sensitivity when the feeling was higher on the stump for the Member intact, normal sensitivity when he said the same feeling in both limbs and absent stump when the patient complained of the absence of any sensation when tested with the brush.

The patient was evaluated in the standing position where the amputated limb remained stretched beside the limb intact, observing any type of contracture. It took into account any changes that the patient could present in flexion, abduction and / or extension of the hip. The second part of the questionnaire was "Functional Measure for Amputees".

The data collected through the questionnaires were tabulated in a Microsoft Excel spreadsheet in 2010 and received statistical treatment. After, was held to discuss the results.

RESULTS AND DISCUSSION

The sample consisted of 12 transfemoral amputees, 8 males and 4 females. Contradicting Agne et al (2004) who reports that the average age of Brazilian amputees is 63.3 years, the age profile of the sample ranged from 19 to 78 years old, with an average of 49.75 years. The time of use of the prosthesis ranged from 7 to 276 months, with an average of 66.33 months. Regarding the level of the stump transfemoral amputation in 4 subjects had proximal, medial third in 6 and 2 in the distal third.

Regarding the sensitivity stump only 2 participants showed an increase of the same, and for others the sensitivity was

normal. In the evaluation of the healing of the amputation stump 7 participants had adherence, 2 had healing invaginated and the other 3 did not change.

Through Questionnaire "Functional Measure for Amputees", it was found that all subjects experienced fall while wearing the prosthesis, however none in the month preceding the interview. The time of use of the prosthesis ranged from 4 to 14 hours per day, with an average of 9.91 hours / day. Since 8 respondents use the prosthesis every day of the week and 4 reported use 4 days a week. Different results were found in the study by Antunes (2010) where the variation was 4-8 hours per day, with an average of 5.77 hours / day.

As concerns the ability to place the prosthesis reports that only one place alone, but with some difficulty and third participants answered that only with the help of another person placing the prosthesis is possible, and these participants presented in healing and adhesion are larger with age (59, 76 and 78 years) and less time to use the prosthesis (8, 9 and 10 months). After the third decade of life, due to the natural aging process, the performance of individual people will deteriorate slowly (Freitas et al., 2006). This fact, coupled with the amputation, can justify the findings. The remaining individuals (8) report put the prosthesis alone, without any difficulty.

The Locomotor Capability Index (ICL), ranged from 10 to 42 with an average of 31.16 points. This result indicates a moderate level of independence and mobility of these individuals. It was found that the smaller ICL were individuals with an average age of 58 years, adherence healing, increased sensitivity and a shorter prosthesis use. In the study sample of Kageyama (2007), consists of 44 lower limb amputees, all participants had ICL greater than 40 points, which the author considered a good level of mobility.

Checking the mobility of individuals within and outside the home, 4 responded perform roughly half of the activities in the wheelchair and half with the prosthesis with the aid during activities indoors responded 2 using walker and these were of full age (76 and 78 years) and had grip healing and 2 reported using crutches. These four individuals disagreed with the phrases: "I always wear my prosthesis for getting me into the house" and "I always wear my prosthesis for getting me out of the house". Since factors presented impedance of use: not getting up fast enough with the prosthesis (4), be very tiring to move around with the prosthesis (2), fatigue and / or discomfort in the lower limb amputee not (2), feeling insecurity (2), when the distance is too long to go (3) and difficult access outside the home (1).

The remaining individuals (8) answered that make almost all activities within the home using the prosthesis and two of them with the aid of a crutch, 4 out of the house did not use assistance, 3 used a crutch and used a walker. With these results, it was found that most individuals used some type of assistance for mobility inside and outside the home and all wore the prosthesis in at least half of the activities.

In the study by Antunes (2010), with nine individuals fitted, 4 responded carry approximately half of those with the prosthesis and half without the prosthesis. 3 of which were using crutches as support during activities, and one walker. Only one person responded that performed approximately half of the activities within the home using a wheelchair, and half with the prosthesis. It was found that this was the same that had the lowest ICL. And, as an aid during the activities in the house, this reported using the walker. The remaining individuals (4) responded that almost all activities performed indoors using the prosthesis, and 2 of them were using aid as a crutch.

When asked about the distance able to walk with the prosthesis without stopping, only two of the twelve subjects responded that they could walk as much as they wanted without stopping. It was found that these individuals had a higher ICL (42) had normal sensibility and the healing of the stump. Through these results, it was found that most people used some kind of help for getting yourself out of the house. And also, the majority of the sample reported perform almost all activities outdoors using the prosthesis.

As for the difficulty in carrying out activities inside and outside the home after amputation, two individuals have responded exactly as directed activities before amputation, with a sensitivity and normal healing. Five responded to all activities indoors and only accomplish some outside, three reported having ceased to carry out most of its activities after amputation compliance with all healing and two reported not being very active before the leg to be amputated, and these individuals aged 76 years and healing with adhesion.

Amputation reveals the actual death of a part of a body, as well as the symbolic death of a lifestyle, a way of being and identity (Paiva; GOELLNER, 2008). The amputees need to live with situations that were customary, rebuilding schemes and motor possibilities for each new situation. Adapt and readapt themselves with this new body condition caused by amputation. However, in some cases, fail to adapt certain activities prior to amputation and fail to perform them (ALBUQUERQUE, Falkenbach, 2009).

It was found that the type of aid more used to walk with the prosthesis, both inside and outside the home, were the crutches. In a study by Teixeira and Novak (2009), attended by seventeen amputees, the main auxiliary equipment was reported by individuals using crutches.

The twelve participants responded have no comment to make about his amputation, prosthesis or rehabilitation. Paiva and Goellner (2008) describe that to talk about the amputee amputated body is a difficult task, as it leaves apparently most visible differences and imperfections.

The Locomotor Capability Index (ICL) showed that study participants had an average level of independence and mobility. Also it was found that most of the sample, after the amputation, he returned to perform all activities inside and outside the home only a few.

CONCLUSION

According to the results found in the present study, we conclude that the factors: advanced age, short term use of the prosthesis, grip healing and increased sensitivity interfered with the functional independence of patients transfemoral prostheses Rehabilitation Center Assisi Gurgacz because individuals who exhibited advanced ages had difficulties in placing the prosthesis independently, decreased motor ability because they have obtained the lowest levels of locomotor capacity (ICL) ranging from 10 to 30 points, the use of hearing aid use as the walker feeling more stable and secure and realize half of their activities inside and outside the home in a wheelchair. As regards the time of use of the prosthesis, subjects who used less than one year can not put it alone and had a low score in the index of locomotor ability (ICL). Patients with grip healing and increased sensitivity also showed dependence on the placement of the prosthesis, low score index locomotor capacity (ICL) and reported having ceased to carry out most activities after amputation.

The completion of this study generated new data on this topic, contributing to the knowledge of the professionals who work with amputees. Since there are not many studies using the questionnaire "Measure Functional Amputee" suggest new research in this area so that we can increasingly provide better care for these patients.

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FACTORS AFFECTING THE FUNCTIONAL INDEPENDENCE OF PATIENTS AMPUTEES TRANSFEMORAL PROSTHESES

ABSTRACT

Introduction: Amputation means a partial or total withdrawal of a member or more, may be surgical or traumatic. Already a transfemoral amputation refers to amputations performed between the knee disarticulation and hip, divided into proximal, middle and distal. Can occur for various reasons trauma, vascular processes, thrombosis, tumors, infections, inborn processes and rheumatoid arthritis. The primary objective of this study was to identify factors that affect the level of functional independence of patients transfemoral prostheses Rehabilitation Center Gurgacz Assisi. Methodology: This is a field study of epidemiologic and evaluative, quantitative cross-sectional survey with a sample comprised 12 individuals: 4 females and 8 males, aged 19-78 years. Data were collected through a questionnaire prepared by the author to evaluate the stump and the questionnaire "Measure Functional Amputee" translated and validated in Brazil by Kageyama in 2007, the interviews occurred FAG Rehabilitation Center in the months of June and July 2013. Results: After the questionnaires showed that the responses were less satisfactory individuals with higher ages being 56, 76 and 78 years, with shorter use of this prosthesis with 8, 9 and 10 months, changes in sensitivity and grip the healing of the stump. Conclusion: From these data, we found that older age and short time of use of the prosthesis, as well as adherence healing and increased sensitivity leads to a stump in the level of functional independence down to the prosthesis, allowing physiotherapy direct their actions regarding rehabilitation, and also showing the need for further research on the topic discussed.

KEYWORDS: transfemoral amputation, functional measure for amputees, stump complications.

FACTEURS L'INDÉPENDANCE FONCTIONNELLE DES PATIENTS AMPUTÉS DES PROTHÈSES TRANSFÉMORALES

RESUMÉ

Introduction: Amputation signifie un retrait partiel ou total d'un membre ou plus, peut être chirurgical ou traumatique. Déjà une amputation se réfère à des amputations effectuées entre la désarticulation du genou et de la hanche, divisé en proximal, moyen et distal. Peut se produire pour diverses raisons traumatisme, processus vasculaires, la thrombose, des tumeurs, des infections, des processus innés et l'arthrite rhumatoïde. L'objectif principal de cette étude était d'identifier les facteurs qui influent sur le niveau d'indépendance fonctionnelle des patients transfemoral prothèses Rehabilitation Center Gurgacz Assise. Méthodologie: Il s'agit d'une étude de terrain sur épidémiologique et évaluative, enquête quantitative transversale auprès d'un échantillon comprenait 12 personnes: 4 femmes et 8 hommes, âgés de 19 à 78 ans. Les données ont été recueillies au moyen d' un questionnaire préparé par l'auteur à évaluer la souche et le questionnaire "mesure fonctionnelle amputés" traduit et validé au Brésil par Kageyama en 2007, des entretiens ont eu lieu FAG Centre de réadaptation dans les mois de Juin et Juillet 2013. Résultats: Après les questionnaires ont montré que les réponses étaient moins satisfaisants personnes avec des âges plus élevés étant 56, 76 et 78 ans, avec une utilisation plus courte de cette prothèse avec 8, 9 et 10 mois, des changements dans la sensibilité et l'adhérence la guérison de la souche. Conclusion: A partir de ces données, nous avons constaté que l'âge avancé et peu de temps d'utilisation de la prothèse, ainsi que la guérison d'adhérence et une sensibilité accrue mène à une souche dans le niveau d'indépendance fonctionnelle jusqu'à la prothèse, ce qui permet physiothérapie orienter leurs actions en matière de réhabilitation, et montrant également la nécessité de poursuivre les recherches sur le sujet discuté.

MOTS-CLÉS: amputation, mesure fonctionnelle pour les amputés, les complications de la souche.

FACTORES QUE AFECTAN A LA INDEPENDENCIA FUNCIONAL DE PACIENTES AMPUTADOS PRÓTESIS TRANSFEMORAL

RESUMEN

Introducción: La amputación significa una retirada parcial o total de un miembro o más, puede ser quirúrgico o traumático. Ya la amputación transfemoral se refiere a las amputaciones realizadas entre la desarticulación de rodilla y cadera, dividido en proximal, medio y distal. Puede ocurrir por varias razones trauma, procesos vasculares, trombosis, tumores, infecciones, procesos innatos y la artritis reumatoide. El objetivo principal de este estudio fue identificar los factores que afectan el nivel de independencia funcional de los pacientes prótesis transfemoral Rehabilitation Center Gurgacz Asís. Metodología: Se trata de un estudio de campo de la epidemiología y de evaluación encuesta transversal, cuantitativo con una muestra compuesta de 12 personas: 4 mujeres y 8 varones, con edades entre 19-78 años. Los datos fueron recolectados a través de un cuestionario elaborado por el autor para evaluar el muñón y el cuestionario "Medida Funcional Amputado" traducido y validado en Brasil por Kageyama en 2007, las entrevistas ocurrieron FAG Centro de Rehabilitación en los meses de junio y julio 2013. Resultados: Después de los cuestionarios mostraron que las respuestas fueron menos satisfactorios individuos con edades superiores que son 56, 76 y 78 años, con uso más corta de esta prótesis con 8, 9 y 10 meses, cambios en la sensibilidad y agarre la curación del muñón. Conclusión: A partir de estos datos, se encontró que la edad avanzada y el corto tiempo de uso de la prótesis, así como la curación adherencia y aumento de la sensibilidad conduce a un muñón en el nivel de independencia funcional a la prótesis, permitiendo que la fisioterapia dirigir sus acciones en materia de rehabilitación, y que muestra también la necesidad de nuevas investigaciones sobre el tema tratado.

PALABRAS CLAVE: amputación transfemoral, medida funcional para amputados, las complicaciones del muñón.

FATORES QUE INTERFEREM NA INDEPENDÊNCIA FUNCIONAL DE PACIENTES AMPUTADOS TRANSFEMORAIS PROTETIZADOS

RESUMO

Introdução: Amputação significa a retirada total ou parcial de um membro ou mais, podendo ser cirúrgica ou traumática. Já a amputação transfemoral refere-se às amputações realizadas entre a desarticulação de joelho e a de quadril, sendo dividida em terço proximal, médio e distal. Pode ocorrer por diversas causas: trauma, processos vasculares, trombose, tumores, infecções, processos congênitos e artrite reumatoide. O objetivo primário do presente estudo foi identificar os fatores que interferem no nível de independência funcional de pacientes transfemorais protetizados do Centro de Reabilitação Assis Gurgacz. Metodologia: Trata-se de um estudo de campo de caráter epidemiológico e avaliativo, quantitativo de corte transversal, sendo a amostra de pesquisa composta por 12 indivíduos: 4 do sexo feminino e 8 do sexo masculino, com idade entre 19-78 anos. Os dados foram obtidos através da aplicação de questionário elaborado pela autora para avaliação do coto e o questionário "Medida Funcional para Amputados" traduzido e validado no Brasil por Kageyama em 2007, as entrevistas ocorreram no Centro de Reabilitação FAG nos meses de junho e julho de 2013. Resultados: Após a aplicação dos questionários verificou-se que as respostas menos satisfatórias foram dos indivíduos com maiores idades sendo 56, 76 e 78 anos, com menor tempo de uso da prótese este com 8, 9 e 10 meses, alteração na sensibilidade e aderência na cicatrização do coto. Conclusão: A partir desses dados, foi possível identificar que idades avançadas e pouco tempo de uso da prótese, bem como a aderência na cicatrização e o aumento da sensibilidade no coto levam a um nível de independência funcional baixo para a utilização da prótese, possibilitando a fisioterapia direcionar suas ações quanto à reabilitação, e mostrando também a necessidade de maiores pesquisas no tema abordado.

PALAVRAS CHAVES: amputação transfemoral, medida funcional para amputados, complicações no coto.