

02 - PROFILE OF AMPUTEE PATIENTS TREATED IN THE FAG REHABILITATION SERVICE IN THE YEAR OF 2014

OLIVIA MASSON VITAL;
DAIANE APARECIDA DO AMARAL;
LEDA PAES WALCKER
FACULDADE ASSIS GURGACZ CASCAVEL, PR-BRASIL
oliviamasson@hotmail.com

doi:10.16887/86.a1.2

INTRODUCTION

In Brazil, the Sistema Único de Saúde (SUS - Unified Health System) is responsible for the actions and services of promotion, protection, recovery and rehabilitation of the citizens' health. The execution may be done directly by the public manager or by a contracted entity, as long as it is in a regionalized and hierarchical manner in increasing complexity levels (SECRETARIA DE ESTADO DA SAÚDE DE SANTA CATARINA, 2008).

The regionalization and hierarchical organization define which population will be treated in a given geographical area. These principles imply the ability of the services to offer to a given population all aid modalities, as well as access to all kinds of technology available, enabling the solution of the problems with a great degree of effectiveness and efficiency (BRASIL, 1990)

Within the SUS proposal to treat the different health needs of the population, the treatment for the amputee patient is highlighted. Assistance to this public requires a service structure with multidisciplinary characteristics that are performed in specialized units of regional scope, qualified to treat people with disabilities. The teams consist of professionals such as doctors, physiotherapists, occupational therapists, speech therapists, psychologists, social workers and nutritionists. These professionals evaluate each case and plan the entire rehabilitation process (BRASIL, 2007).

In order to structure this service of higher level of complexity, the Ministry of Health through ordinance No. 818, dated June 5, 2001, instituted the Rehabilitation Centres or Reference Service in Physical Medicine and Rehabilitation, characterized it as an outpatient clinic that offers specialized services for diagnosis, evaluation and treatment of people with physical disabilities. This service shall have adequate physical facilities, equipment and a specialized multi-professional, multidisciplinary team, for the treatment of patients that require critical care physical rehabilitation (motor and sensory motor), constituting in the reference of high complexity of the state or regional service network for the person with disability. It includes prescription, evaluation, adaptation, training, monitoring and dispensing of Orthoses, Prostheses and Mobility Aids (BRASIL, 2001)

Located in Cascavel-PR, the Centro de Reabilitação da Fundação Assis Gurgacz (FAG - Assis Gurgacz Foundation Rehabilitation Centre) is one of units of the SUS, qualified as a provider unit of Reference Service in Physical Medicine and Rehabilitation serving as a reference to six health regional areas within the state, which are: 20th Toledo, 10th Cascavel, 11th Campo Mourão, 9th Foz do Iguaçu, 8th Francisco Beltrão and 7th Pato Branco. Each health regional is a reference for other municipalities. With such a large coverage range, the FAG - Rehabilitation Centre covers about 150,000 people, who could potentially be users of rehabilitation centre (WALCKER, 2012).

According to the World Health Organization (WHO), currently, in the world, there are over one billion people who live with some form of disability and, among these, 200 million experience considerable functional difficulties. In the 2010 Brazilian Census, data from the Brazilian Institute of Geography and Statistics (IBGE) shows that 24% of the population claims to have some form of disability, but does not specify how many are disabled due to amputation of limbs. In the guidelines of attention to amputees, published in 2013, the Ministry of Health recognizes that there is no precise data on the subject. There are only estimates and displaced numbers. It is believed that about 85% of limb amputations are of lower limbs (BRASIL, 2013).

Considered one of the oldest therapeutic resources of medicine, the word amputation means the removal, usually surgical, total or partial, of a body part. The clinical amputation, involving mainly the lower limbs, is the most frequent in patients with vascular diseases. Traumatic etiologies, tumors, infections, neuropathic etiologies are also related to limb amputation, as well as congenital and iatrogenic etiologies. (CARVALHO, 2003; BOCOLINI, 2000)

Amputations determined by the complications of peripheral vascular diseases usually affect older patients, whereas traumatic amputations affect mainly adolescents and young adults, who are more exposed to work accidents and traffic accidents. Amputations caused by tumors affect more children and adolescents, these due to the good results obtained through early diagnosis, have declined considerably. Infectious etiology as well as tumors have also been less frequent due to the laboratory advancement and pharmacology development (CARVALHO, 2003).

Santos and Nascimento (2003 apud Debastiani, 2005) claim that despite modern equipment available and the awareness of health professionals, the definition of the level of amputation, seeking to preserve greater amount of viable tissue is not an easy task. The authors point out that the more distal the amputation is, the lower the energy expenditure of the patient to perform maneuvers because they favor adaptation to prosthetics and reduce financial costs enabling the return to social and professional life sooner.

Given the above, the objective of this study is to describe characteristics of the amputee patients who received the first treatment at the FAG Rehabilitation Centre, in 2014, according to age, sex, levels, amputation causes, and/or amputations, and already if they have already received prostheses.

MATERIALS AND METHODS

The study was of the documentary, cross-sectional, retrospective, descriptive type, conducted through the analysis of data obtained from medical records of amputee patients referred to the FAG - REHABILITATION CENTRE, located in the city of Cascavel. All patients were included who have suffered some kind of amputation of limbs, upper and/or lower, and were admitted at the abovementioned Rehabilitation Centre in the period from January 1 to December 31, 2014, and who received or not, the prosthesis indicated, in the same year. Data was collected and recorded in spreadsheets in the Microsoft Excel 2010 program and the results obtained were organized into appropriate graphics.

RESULTS AND DISCUSSION

Coming from various municipalities in the state of Paraná, sent by the various regional health departments for which the Fag - Rehabilitation Centre is a reference, to serve as sample for this study, 156 records of patients who fulfilled the inclusion criteria were selected. Of the surveyed individuals, 119 (76.29%) were male and 37 (23.71%) were female. The average age was

53.33 years, with a minimum of age four and the maximum age of 93, according to the distribution shown in graphic 1.

Graphic 01. Incidence of amputations pursuant to age and sex of the patients referred to the Fag- Rehabilitation Centre in 2014.



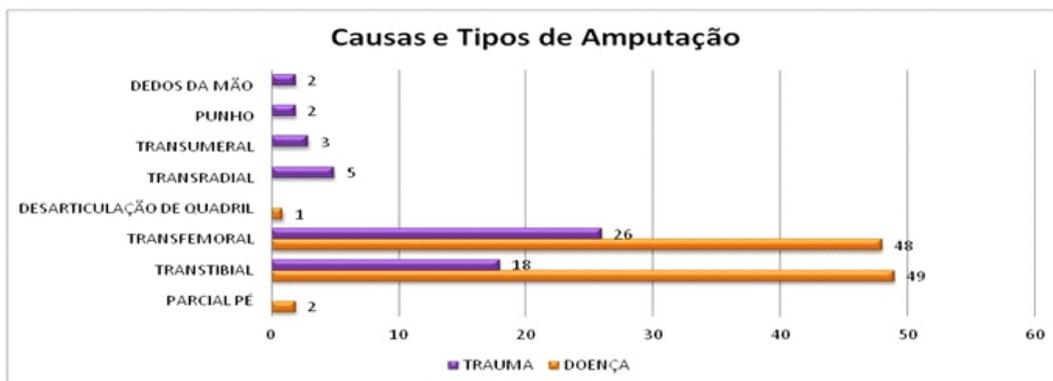
Excluding the age group of zero to 19 years where the results are similar, the male gender appears as majority in all other age groups, especially the 27.56% who were in the range between 40 and 59 years old and 28.84% of the range between 60 and 79 years of age. In the same age group was most, 9.61%, of the female amputees in this sample.

In the study published by Reis et al (2012) the average age was 49.22 years, with a minimum of 2 years and a maximum of 95 years in a sample of 116 medical records, where 83 were male and 33 female corresponding to 71.56% and 28.44%, respectively. Different publications also show evidence of males as being the majority among amputees. Another example is the study conducted by Montiel et al (2012) which used a sample of 467 subjects, where 322 (68.95%) were male and 145 (31.04%) female. Carvalho et al (2005) justifies these results stating that possibly due to the fact that the male population is more exposed to physical trauma resulting from accidents and/or due to being the most affected by amputations caused by vascular complications.

According graph 2, twelve people (7.69%) had amputation of the upper limbs, and two of them lost fingers of one hand, two suffered wrist amputation, three amputations were transmeral and 5 transradial. All from traumatic etiology. 144 people suffered the removal of the lower limbs, the majority unilateral (only three bilateral lower limb amputee cases were found). The registered amputation levels were one (1) hip dislocation, 74 transfemoral type amputations, 67 transtibial type amputations and two foot (partial) amputations, totaling 92.30%. corroborate with data released by SUS in 2011, when 94% of amputations were performed on lower limbs (BRASIL, 2013).

Also of traumatic origin, but of lower limbs, 26 amputations at the transfemoral level and 18 of the transtibial type were observed. Of the 56 people amputated due to traumatic etiology, seven (7) were female and 49 male, where four (4) were in the age range between zero and 19 years, 22 people between ages 20 and 39, 20 people from age 40 to 59 and 10 people were in the range between ages 60 and 79. In the relationship between age and the cause of amputation, there was predominance of trauma cause in the age group between ages 20 and 39. Tolotti and Silva (2004) emphasize that trauma constitutes a serious public health problem, because it usually affects a young age group, considered economically active. Another trauma characteristic is that it has more devastating effects than any of the other diseases together, causing the loss of years of life, temporary and/or permanent disability and the consequent individual and social costs, many of which are irreparable.

GRAPH 2 Distribution of the number of amputees, with absolute values, the etiology and level of amputation of upper and lower limbs.



In this study we observed a large number of clinical etiology amputations, one hundred (100) people suffered amputation as a result of complications of one or more associated pathologies. Of this total, 30 patients were female and 70 male. There was a prevalence of males over females in the approximate ratio of 2:1. Tavares et al (2009) states that this fact may be related to higher caution that women have with themselves, cautions that favor the prevention of risk factors associated with amputation due to complications of chronic degenerative diseases.

In the distribution among age groups, four (4) of these persons were aged between zero and 19 years, four (4) between ages 20-39, 34 between ages 40-59 years, 50 between ages 60-79 years and 8 people were in the range between ages 80 and 99. The higher incidence of non-traumatic amputation cause, (32.05%) occurred among the elderly who were in the range between 60 and 79, of these 50 patients, 45 were male. The main amputation due to vascular disorders occur in individuals over age 50. (REIS et al 2012; UMBURANAS et al 2009).

Carvalho et al (2005) citing data by Custon & Bongiorno (1996) they guarantee that most patients who underwent amputation for vascular cause are elderly, and this number is increasing due to the aging population and the prevalence of peripheral vascular disease. The incidence of lower limb amputations increases after 55 years of age, especially in men, confirming the results of this study.

In this analysis, there was the dominance of amputations at the level above the knee (transfemoral), 74 cases (47.43%), of these, 30.76% were due to vascular etiology, followed by 67 cases (42.94%) of amputations below the knee (transtibial), where 31.41% of amputations were due to vascular cause. These findings contrast literature in general and the findings of Umburanas et al (2009), who conducted a study with 201 patients enrolled in the Physical Rehabilitation Service at

Unicentro, where 35.8% of subjects had transfemoral amputations, approximately 75% of vascular cause and 40.3% suffered transtibial amputations, of those (also in approximate data), 42% were due to vascular etiology.

Of the 156 records of patients analysed that made up the sample, 109 of them received prosthesis in the same year they come to the Institution. It was not the objective of this study to raise the causes of not receiving prostheses nor if those who received them are using them, but it is known that problems on the stump, elderly people with muscle problems, people where the remaining lower limb is compromised and those with disturbances in the labyrinth or cerebellar, among others, will have a harder time adapting to the use of the prosthesis (BOCOLINI, 2000).

CONCLUSION

In the characterization of the 156 amputee patients treated at FAG's Rehabilitation Center throughout the year of 2014, it became clear that the male population widely led in all aspects, was the majority of clinical amputations, traumatic amputations and in the most affected age group, except the age group of up to age 20, when they tied with the female gender. Literature data affirms that this is because men are the main victims of accidents and vascular diseases.

The most frequent age group for clinical amputation was ages 60 to 79 years, while in traumatic amputations, the age ranged between 40 and 59 years. The latter is still considered an economically active population, and are therefore more exposed to risks in traffic and at work.

Most patients seen already have prostheses, promoting quality of life and greater independence with functional improvement.

It is believed that a study of this nature can contribute to the awareness of the need for self-care with health and remember that the causes and consequences of trauma almost always depend on human actions. From this perspective, actions involving Education and Health when aimed at the prevention of chronic degenerative diseases can reduce clinical amputations and, caution at work and in traffic also contribute to decreasing amputations originated from such accidents.

REFERENCES

- BOCOLINI, F. Reabilitação – Amputados, Amputações e Próteses. 2.ed. São Paulo: Robe Editorial, 2000.
- BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. ABC DO SUS Doutrinas e Princípios, 1990. Disponível em <http://www.pbh.gov.br/smsa/bibliografia/abc_do_sus_doutrinas_e_principios.pdf> Acesso em 04ago 2015.
- _____. BRASIL. Ministério da Saúde. PORTARIA Nº 818, DE 5 DE JUNHO DE 2001. Disponível em <sna.saude.gov.br/legisla/legisla/port.../GM_P818_01port_def_reab.doc> Acesso em 08ago 2015.
- _____. BRASIL. Ministério da Saúde. A pessoa com deficiência e o sistema único de saúde, 2007. Disponível em <http://bvsm.saude.gov.br/bvs/publicacoes/07_0327_M.pdf> Acesso em 04ago 2015.
- _____. BRASIL. Ministério da Saúde. Diretrizes de Atenção à Pessoa Amputada, 2013b. Disponível em <http://bvsm.saude.gov.br/bvs/publicacoes/diretrizes_atencao_pessoa_amputada.pdf> Acesso em 08ago 2015
- CARVALHO, F. S.; KUNZ, V. C.; DEPIERI, T. Z.; CERVELINI, R. Prevalência de amputação em membros inferiores de causa vascular: análise de prontuários. Arq. Ciênc. Saúde Unipar, Umuarama, 9(1), jan./abr. p.23-30, 2005. Disponível em <<http://revistas.unipar.br/saude/article/viewFile/215/189>>. Acesso em 10ago 2015.
- CARVALHO, J. A. Amputações de membros inferiores – Em busca da plena reabilitação. 2. ed. São Paulo: Ed. Manole, 2003.
- MONTIEL, A; VARGAS, M. A. O; LEAL, S. M. C. Caracterização de pessoas submetidas à amputação. Disponível em <<http://revista.portalcofen.gov.br/index.php/enfermagem/article/view/377>>. Acesso em 15set 2015.
- REIS, G.; CASA JR, A. J.; CAMPOS, R. S. Perfil epidemiológico de amputados de membros superiores e inferiores atendidos em um centro de referência. Disponível em <<http://www.resceafi.com.br/vol2/n2/Gleycykely-dos-Reis-52-62.pdf>>. Acesso em 15set 2015.
- SANTOS C.A.S., NASCIMENTO P.F.T. Debridamento e amputações. In. DEBASTIANI, J.C. Avaliação do equilíbrio e funcionalidade em indivíduos com amputação de membro inferior protetizados e reabilitados. Disponível em <<http://www.unioeste.br/projetos/elrf/monografias/2005/pdf/jean.pdf>> Acesso em 14set 2015.
- SECRETARIA DE ESTADO DE SAÚDE DE SANTA CATARINA. Plano Operativo para Organização da Rede de Assistência à Pessoa com Deficiência Física em Santa Catarina. Florianópolis, Novembro 2008. Disponível em <http://www.saude.sc.gov.br/geral/planos/Plano_reabilitacao_deficiencia_fisica/Plano_de_Reabilitacao_Fisica.pdf>. Acesso em 04ago 2015.
- TAVARES, D. M. S.; DIAS, F. A.; ARAUJO, L. R.; PEREIRA, G. A. Perfil de clientes submetidos a amputações relacionadas ao diabetes mellitus. Disponível em <<http://www.scielo.br/pdf/reben/v62n6/a04v62n6.pdf>>. Acesso em 15set 2015.
- TOLOTTI, V. C.; SILVA, L. A. A. Caracterização das Vítimas de Trauma Atendidas em Emergência Hospitalar no Norte do Estado do Rio Grande do Sul. Disponível em <<https://www.revistas.unijui.edu.br/index.php/contextoesaude/article/view/1338/1106>>. Acesso em 15set 2015.
- UMBURANAS, R. C.; DUBIELA, A.; PEREIRA, C. S.; NOVAK, V. C. Amputação de membro inferior: perfil dos pacientes do serviço de reabilitação física da Unicentro – Projeto órtese e prótese. Disponível em <http://www.inicepg.univap.br/cd/INIC_2009/anais/arquivos/0643_0982_01.pdf> Acesso em 15set 2015.
- WALCKER, L. P. Erro Humano e Serviços: Diretrizes para um Centro de Referência em Medicina Física e Reabilitação do Sistema Único de Saúde. Tese (Doutorado) - Curso de Engenharia de Produção, Departamento de Engenharia de Produção e Sistemas, Universidade Federal de Santa Catarina, Florianópolis, 2012. Disponível em <<https://repositorio.ufsc.br/handle/123456789/99299>>. Acesso em 02ago 2015.

Autora correspondente: Olivia Masson Vital E-mail: oliviamasson@hotmail.com
Endereço: Rua Ipê, 446 –Parque Verde- Cascavel - PR – Brasil CEP- 85807-680

EPIDEMIOLOGICAL PROFILE OF AMPUTEE PATIENTS TREATED IN THE FAG REHABILITATION SERVICE IN THE YEAR OF 2014

ABSTRACT

Amputation is considered one of the oldest medical therapeutic resources and designates the total or partial removal of a body part. Objective: describe the characteristics of the amputee patients concerning age, gender, levels, amputations causes and if they have already received prostheses. Method: A cross, retrospective, descriptive study involving 156 amputee subjects treated for the first time at FAG's Rehabilitation Centre in 2014. The data was collected and registered in spreadsheets in the program Microsoft Excel 2010. Results: The male gender represented 76.29% of the sampling. The average age was 53.33

years. 64% suffered amputation due to one or more pathologies and 36% due to traumatic processes. The most frequent age range in the clinical amputations was 60 to 79 years, while in the traumatic amputations the age varied from 20 to 39. As for the level of amputations, there was predominance in the transradial level in the upper limbs and transfemoral level, in the lower. Of the 156 amputees, 3 subjects had bilateral amputation and 109 had already received prosthesis at the end of that year. Conclusion: It was seen that the male population was the majority of the clinical amputations, traumatic amputations and in the most affected age group, except in the age range up to age 20, where it tied with the female gender. We believe that a project of this nature may contribute to the awareness about the need for taking care of your own health and warn that the causes and consequences of trauma almost always depend on human actions.

KEYWORDS: Rehabilitation Centre, Amputees, Epidemiological profile.

PROFIL ÉPIDÉMIOLÓGICO DES PATIENTS AMPUTÉS PRIS EN CHARGE PAR LE SERVICE DE RÉHABILITATION DE LA FAG AU COURS DE L'ANNÉE 2014

RÉSUMÉ

L'amputation est considérée comme l'un des plus anciens moyens thérapeutiques de la médecine et désigne le retrait total ou partiel d'une partie du corps. Objectif : décrire les caractéristiques des patients amputés relatives à leur âge, sexe, niveaux, la cause de l'amputation et s'ils portent déjà des prothèses. Méthode : Étude transversale, rétrospective et descriptive sur 156 sujets amputés pris pour la première fois en charge par le Centre de Réhabilitation de la FAG au cours de l'année 2014. Les données ont été collectées et enregistrées sur des tableaux préparés au moyen du logiciel Microsoft Excel 2010. Résultats : Le genre masculin a représenté 76,29% de l'échantillonnage. L'âge moyen a été de 53,33 ans. 64% ont été amputés en raison d'une ou de plusieurs pathologies et 36% par des procédés traumatiques. Le groupe d'âge le plus fréquent qui passe par des amputations cliniques a été celui de 60 à 79 ans, tandis que pour les traumatiques l'âge varie de 20 à 39 ans. Quant aux niveaux d'amputation, il existe une prédominance du niveau transradial sur les membres supérieurs et du niveau transfémoral, sur les inférieurs. Des 156 amputés, 3 sujets ont subi une amputation bilatérale et 109 avaient déjà reçu une prothèse à la fin de cette année. Conclusion: Il a été démontré que la population masculine était la majorité dans le cas des amputations cliniques, traumatiques et dans le groupe d'âge le plus touché, à l'exception du groupe d'âge allant jusqu'à 20 ans, quand elle est dans la même proportion que la féminine. Nous pensons qu'un travail de cette nature peut contribuer à la prise de conscience d'un besoin de soins personnels relatifs à la santé et avertir que les causes et les conséquences des traumatismes dépendent principalement des actions humaines.

MOTS-CLÉS: Centre de Réhabilitation, Amputés, Profil épidémiologique.

PERFIL EPIDEMIOLÓGICO DE LOS PACIENTES AMPUTADOS ATENDIDOS EN EL SERVICIO DE REABILITACIÓN DE LA FAG DURANTE EL AÑO DE 2014

RESUMEN

La amputación es considerada uno de los recursos terapéuticos más antiguos de la medicina y designa la retirada total o parcial, de un segmento corporal. Objetivo: describir características de los pacientes amputados con relación a edad, género, niveles, causas de la amputación y si ya se encuentran protetizados. Método: Estudio transversal, retrospectivo y descriptivo, envolviendo a 156 sujetos amputados y atendidos por primera vez en el Centro de Rehabilitación de la FAG en el año de 2014. Los datos fueron recolectados y registrados en planillas del programa Microsoft Excel 2010. Resultados: El género masculino representó el 76,29 % de la muestra. El promedio de edad fue de 53,33 años. El 64 % sufrió amputación a causa de una o más patologías y el 36 % por procesos traumáticos. La franja etaria más frecuente en las amputaciones clínicas fue la de los 60 a 79 años, mientras que en las traumáticas la edad varió entre los 20 y 39 años. Con relación a los niveles de amputación, hubo un predominio del nivel transradial en los miembros superiores y del nivel transfemoral, en los inferiores. De los 156 amputados, 3 sujetos sufrieron amputación bilateral y 109 ya habían recibido prótesis ese mismo fin de año. Conclusión: Se evidenció que la población masculina fue la mayoría en las amputaciones clínicas, en las traumáticas y en la franja etaria más acometida, exceptuando la franja hasta los 20 años, que empató con el género femenino. Se cree que un trabajo de esta naturaleza pueda contribuir para la concientización sobre la necesidad del autocuidado de la salud y advertir que las causas y las consecuencias del trauma dependen casi siempre de las acciones humanas.

PALABRAS CLAVE: Centro de Rehabilitación, Amputados, Perfil epidemiológico.

PERFIL EPIDEMIOLÓGICO DOS PACIENTES AMPUTADOS ATENDIDOS NO SERVIÇO DE REABILITAÇÃO DA FAG NO ANO DE 2014

RESUMO

Amputação é considerada um dos recursos terapêuticos mais antigos da medicina e designa a retirada total ou parcial, de um segmento corporal. Objetivo: descrever características dos pacientes amputados quanto à idade, gênero, níveis, causas da amputação e se já se encontram protetizados. Método: Estudo transversal, retrospectivo e descriptivo, envolvendo 156 sujeitos amputados atendidos pela primeira vez no Centro de Reabilitação da FAG no ano de 2014. Os dados foram coletados e registrados em planilhas do programa Microsoft Excel 2010. Resultados: O gênero masculino representou 76,29% da amostra. A média de idade foi de 53,33 anos. 64% sofreram amputação decorrente de uma ou mais patologias e 36% por processos traumáticos. A faixa etária mais frequente nas amputações clínicas foi a de 60 a 79 anos, enquanto nas traumáticas a idade variou entre 20 e 39 anos. Quanto aos níveis de amputação, houve predomínio do nível transradial nos membros superiores e do nível transfemoral, nos inferiores. Dos 156 amputados, 3 sujeitos sofreram amputação bilateral e 109 já tinha recebido prótese no final daquele ano. Conclusão: Evidenciou-se que a população masculina foi maioria nas amputações clínicas, nas traumáticas e na faixa etária mais acometida, excetuando a faixa até os 20 anos, quando empatou com o gênero feminino. Acredita-se que um trabalho dessa natureza possa contribuir para a conscientização sobre a necessidade do autocuidado com a saúde e advertir que as causas e as consequências do trauma dependem quase sempre das ações humanas.

PALAVRAS-CHAVE: Centro de Reabilitação, Amputados, Perfil epidemiológico.