

54 - MAIN ETIOLOGY OF TRANSFEMORAL AMPUTATION IN PATIENTS TREATED AT FAG REHABILITATION CENTER

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INTRODUCTION

Carvalho (1999) defines: amputation means the removal, usually surgical, of an entire member or a part of it. The word amputation, according to Santos et al (2010), is a Latin word, indicating the following: ambi = around / round and putatio = prune / remove.

In Brazil, it is estimated that the incidence of amputation is of 13.9 per 100,000 inhabitants / year. (Santos et al, 2010).

The amputation often occurs after all possible efforts to save an affected extremity and should be conceived by the patient as the beginning of a new stage, it must be clear that the procedures for amputation of MMII are an act of restoring an unhealthy organ and not a mutilation. (Pires, S.R.; & SANDOVAL, 2010)

Also according to Carvalho (1999) The transfemoral amputation refers to any amputation performed between the disarticulation of the knee and the hip, which can be divided into three levels, ie, transfemoral amputation in the proximal third, middle and distal. In distal third transfemoral is preserved over 60% of femoral length, in the middle third transfemoral it keeps between 35 to 60% of femoral length, and in the proximal third transfemoral it's preserved less than 35% of femoral length.

To Bocolini (2000) There are three causes of amputations, which are: the congenital, in which the patient is already born with the lack of a limb or part of it. Those resulting from violent trauma which amputation can occur at the accident site or shortly after at the hospital, and also those resulting from circulatory, tumor or infectious disease in which, even though being an irrecoverable fact, there is always the hope of "escape" which actually does not exist. And Carvalho (1999) found the following causes of lower limb amputations, which are: vascular causes, trauma, tumors, infectious and congenital diseases.

In concern to vascular causes (Carvalho, 1999) states: it occurs mainly in older patients because they are more susceptible to degenerative diseases, which is the cause that prevails over the others.

Custon (1996) agrees saying that the majority of patients undergoing amputation for vascular cause are elders, and that number is increasing because of aging population and the prevalence of peripheral vascular diseases.

To Bocolini (2000) traumatic amputations affect mainly teenagers and young adults, who are more exposed to work accidents and accidents by transportation facilities, fruits of modern technology.

Based on this background, this study aims to verify the etiology of transfemoral amputations in patients treated at FAG Rehabilitation Center in Cascavel - PR.

MATERIALS AND METHODS

It is a field study with an epidemic character, cross sectional and quantitative. The population was predominantly lower-limb amputees receiving medical care at FAG Rehabilitation Center from February to April 2011.

The sample consisted of the first 30 individuals – since for Pasquali (2003) samples composed of 30 or more individuals are considered large and suitable for face validity. – Amputees who have contemplated the inclusion criteria of this research, the selection was made randomly.

The inclusion criteria are: being lower-limb transfemoral amputees, accept to participate in the research and sign a Commitment Term of participation, perform or have already performed services at FAG Rehabilitation Center FAG from February to April 2011, be over 18 years old and preserved cognitive. Exclusion criteria are: there weren't lower-limb transfemoral amputation, do not have a treatment at FAG Rehabilitation Center from February to April 2011, did not accept to participate in and / or sign the Commitment Term, be under 18 years old and have cognitive impairment.

Data collection has been taken through an interview with the amputee, individually in a room. The interview consisted of seven closed questions. At the end of the collecting the data were plotted and analyzed using SPSS 15.0.

RESULTS AND DISCUSSION

Based on the survey it was found that the age group of the individuals who participated in the study ranges from 19 to 81 years old. With an average age of 57.8 (\pm 17.4) years. And the average age in the period in which the amputation took place is 49 (\pm 20) years.

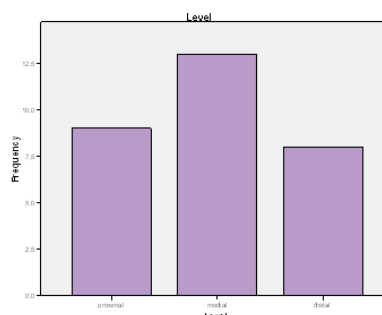
Regarding to the 30 individuals gender there were predominantly males, in which: 73.3% were males and 26.7% females. Nissen (1992) quotes the predominance of males in his (se for mulher, não é his, é "her" – como não dava pra saber, deixei His, aí se for mulher vc troca) studies. For Silva & Moura (2005) (in his(aqui tb) book published based on the AACD project), the amputation occurs more frequently in males (68%) and only 32% among females according to his (e aqui tb!!! ehehe) findings in that research.

Checking the side amputation there were 43.7% on the right side and 56.7% on the left one.

Regarding to the use of prosthesis or not, 73.3% make use of prosthesis, and 26.7% do not use them.

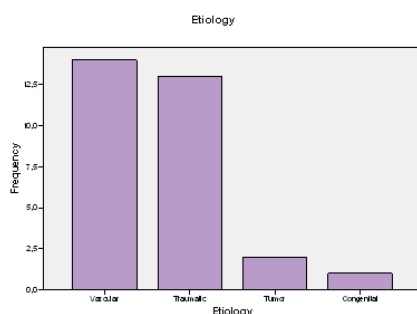
Concerning to the level of transfemoral amputation, we had higher incidence of medial level as shown in graphic number 01. Proximal: 9 cases (30%), medial: 13 cases (43.3%), and finally 8 cases of distal level (26.7%).

GRAPHIC 01 – Transfemoral amputation levels found in the survey respondents:



Concerning to the etiology of the amputation it was verified 46.7% of vascular causes, 43.3% of traumatic cause, 6.7% of tumor and 3.3% of congenital causes, totaling 100% of respondents as shown in graph number 02.

GRAPHIC 02 – Transfemoral amputations etiology :



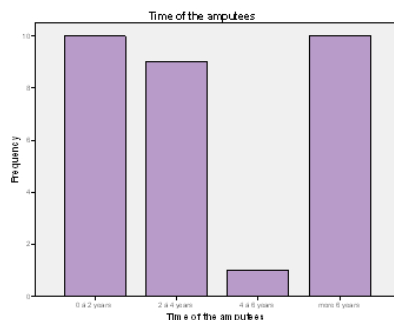
The results found in this study have been the same checked by Cassefo (2003), in which the observed distribution in the amputation etiology was: 59.2% vascular, 24 traumatic%, 5.3% tumor, 5% infectious, 3.1% congenital, 1.1% others and 2.3% with no reference. Jumes (2010) also obtained the same results in relation to transfemoral amputees etiology of in his studies, as follows: 54.8% of respondents had amputation because of vascular causes, 29% traumatic, 6.5% tumor, 3.2% infectious, 3.2% neuropathic and 3.2% congenital.

Lianza (2001) also agreed that vascular disease is considered the main cause of extremities amputation such as lower-limbs.

Oliveira (2007) obtained different results, and the main cause found was the traumatic, and as the second one the vascular cause, but this study included patients with either upper-limbs and lower-limbs amputation, different of this study that examined only lower-limb amputees with transfemoral level.

Related to the time of amputation, 33.3% of respondents held it from zero to two years, 30% from two to four years, 3.3% from four to six years, and 33.3% underwent amputation from more than six years as shown in the graphic below.

GRAPHIC 03 – Amputation time of the transfemoral amputees:



CONCLUSION

It can be concluded with this assignment that the main transfemoral amputation etiology is vascular cause, followed by traumatics, tumors and ultimately congenital causes, as well as that most amputees are male and the transfemoral amputation level most found has been the medial. About the side of the lower-limbs in which this type of amputation took place, most of them was at the left side.

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MAIN ETIOLOGY OF TRANSFEMORAL AMPUTATION IN PATIENTS TREATED AT FAG REHABILITATION CENTER

ABSTRACT

Introduction: Amputation is defined as the removal, usually surgical, of an entire member or a part of it. The amputation often occurs after all possible efforts to save an affected extremity. Amputations can occur for different causes, including vascular processes, neuropathics, traumathics, tumors, infectious and congenital. The transfemoral amputation refers to any amputation performed between the disarticulation of the knee and the hip. **Aim:** Identify which is the main transfemoral amputation etiology in patients treated at FAG Rehabilitation Center. **Methodology:** It is a field study with an epidemic character, cross sectional and quantitative. The inclusion criteria are: being over 18 years old and have the cognitive preserved, perform services at FAG Rehabilitation Center and accept to participate in the research; 30 patients with transfemoral amputation fit in the inclusion criteria and answered na interview with seven closed questions. At the end of the collecting the data were plotted and analyzed using SPSS 15.0. **Results:** It became evident that 73.3% of patients were male and 26.7% female. Checking the side of amputation there were 43.7% on the right side and 56.7% on the left side. The respondents' average age was 57.8 (\pm 17.4) years old. Regarding the amputation level, it was predominantly medial. About the lower-limb transfemoral amputation etiology, 46.7% were from vascular causes, 43.3% from traumatic causes, 6.7% from tumors and 3.3% from congenital causes. **Conclusion:** It could verified at this study that the main transfemoral amputation etiology occurred from vascular causes, with prevalence of male gender and assailing of the left member.

KEYWORDS: Amputation. Etiology. Physiotherapy.

PRINCIPALE CAUSE DE PATIENTS AMPUTATION INSCRITS DANS LE FAG CENTRE DE READAPTATION RESUME

Introduction: L'amputation terme peut être défini comme le retrait, habituellement la chirurgie, tout ou partie d'un membre. Amputation survient souvent après toutes les tentatives possibles pour sauver une extrémité affectée. Amputations peut se produire pour plusieurs raisons, parmi eux les processus vasculaires, neuropathiques, traumatique, tumorale, infectieuse et congénitale. L'amputation se réfère à l'amputation effectuée entre tous les désarticulation du genou et la hanche. **Objectif:** identifier ce que la principale cause d'amputation transfémorale des patients traités à la FAG centre de réadaptation. **Méthodologie:** Il s'agit d'une étude de terrain, avec une épidémie, une transversale et quantitatives. Comme les critères d'inclusion: être sur dix-huit ans et ont conservé le cognitif, la conduite des soins cliniques en réadaptation FAG, le consentement à participer à, où trente patients avec amputation répondent aux critères d'inclusion et ont répondu à une interview avec des questions 07 fermé. A la fin des données recueillies ont été compilées et analysées en utilisant SPSS 15.0. **Résultats:** Il y avait un patient atteint 73,3% étaient des hommes et des femmes de 26,7%. Vérification du côté de l'amputation ont été de 43,7% sur le côté droit et 56,7% sur la gauche. L'âge moyen des répondants était de 57,8 (\pm 17,4) ans. Concernant le niveau de l'amputation était la médiale prédominante. En ce qui concerne l'étiologie de l'amputation des membres inférieurs ont été transfémorale 46,7% des causes vasculaires, 43,3% de cause traumatique, tumorale 6,7% et 3,3% des causes congénitales. **Conclusion:** Il y avait cette étude que la principale cause d'amputation transfémorale pour des causes vasculaires survenus, avec une prédominance des hommes avec la participation de la réclamation membre.

MOTS-CLÉS: Amputation. Étiologie. Physical Therapy.

PRINCIPAL ETIOLOGÍA DE LA AMPUTACIÓN TRANSFEMORAL EN LOS PACIENTES TRATADOS EN EL CENTRO DE REHABILITACIÓN DE FAG RESUMEM

Introducción: El término amputación puede ser definido como la retirada, generalmente quirúrgica, total o parcial de um miembro. La amputación ocurre, a menudo, después de todos los intentos posibles para salvar una extremidad afectada.

Las amputaciones pueden ocurrir por diversas causas, entre ellas, los procesos vasculares, neuropáticos, traumáticos, tumorales, infecciosos y congénitos. La amputación transfemoral se refiere a cualquier amputación realizada entre la disarticulación de la rodilla y la cadera. **Objetivo:** Identificar cual es la principal etiología de las amputaciones transfemorales de los pacientes asistidos en el Centro de Rehabilitación de FAG. **Metodología:** Se trata de un estudio de campo, con carácter epidemiológico, de corte transversal e cuantitativo. Son criterios de inclusión: ser mayor de 18 años y tener el cognitivo preservado, haber sido asistido en la Clínica de Rehabilitación de FAG, aceptar participar de la investigación, en la cual treinta pacientes con amputación transfemoral encajaron en los criterios de inclusión y respondieron a una entrevista con 07 preguntas cerradas. Al final de la colecta los datos fueron tabulados y analizados utilizandose el programa SPSS 15.0. **Resultados:** Resultó evidente que el 73,3% de los pacientes del género masculino y que 26,7% eram del género femenino. Al comprobar el lado de la amputación, fueron 43,7% en el lado derecho y el 56,7% en el izquierdo. La media de edad de los encuestados fue de 57,8 (\pm 17,4) años. El nivel de amputación fue predominantemente la medial. En cuanto a la etiología de las amputaciones de las extremidades inferiores transfemorales 46,7% fueron por causas vasculares, el 43,3% de causa traumática, 6,7% del tumor y el 3,3% de causa congénita. **Conclusión:** Se ha comprobado con ese estudio que la principal etiología de la amputación transfemoral se produjo por causas vasculares, siendo que hubo el predominio del género masculino con más grande comprometimiento del miembro izquierdo.

PALABRAS CLAVE: Amputación. Etiología. Fisioterapia.

PRINCIPAL ETIOLOGIA DE AMPUTAÇÃO TRANSFEMORAL EM PACIENTES ATENDIDOS NO CENTRO DE REABILITAÇÃO FAG**RESUMO**

Introdução: O termo amputação pode ser definido como sendo a retirada, geralmente cirúrgica, total ou parcial de um membro. A amputação freqüentemente ocorre após todas as tentativas possíveis para se salvar uma extremidade acometida. As amputações podem ocorrer por diversas causas, entre elas, processos vasculares, neuropáticos, traumáticos, tumorais, infecciosos e congênitos. A amputação Transfemoral refere-se a toda amputação realizada entre a desarticulação de joelho e a de quadril. **Objetivo:** Identificar qual a principal etiologia das amputações transfemorais dos pacientes atendidos no centro de reabilitação FAG. **Metodologia:** Trata-se de um estudo de campo, com caráter epidemiológico, de corte transversal e quantitativo. Sendo os critérios de inclusão: ser maior de dezoito anos e ter o cognitivo preservado, realizar atendimento na clínica de reabilitação FAG, aceitar participar da pesquisa, onde trinta pacientes com amputação transfemoral se encaixaram nos critérios de inclusão e responderam a uma entrevista com 07 questões fechadas. Ao final da coleta os dados foram tabulados e analisados no programa SPSS 15.0. **Resultados:** Evidenciou-se paciente com 73,3% foram do sexo masculino e 26,7% do sexo feminino. Verificando o lado da amputação 43,7% foram do lado direito e 56,7% do lado esquerdo. A média de idade dos entrevistados foi de 57,8 (\pm 17,4) anos. Quanto ao nível da amputação o predomínio foi medial. Com relação a etiologia das amputações de membro inferior transfemoral 46,7% foram de causas vasculares, 43,3% de causa traumática, 6,7% tumoral, e 3,3% de causa congênita. **Conclusão:** Verificou-se neste estudo que a principal etiologia da amputação transfemoral ocorreu por causas vasculares, sendo predomínio do sexo masculino com acometimento do membro sinistro.

PALAVRAS-CHAVE: Amputação. Etiologia. Fisioterapia.