149 - SELF-CARE IN PATIENTS SUBMITTED TO THE BARIATRIC SURGERY: A CASE STUDY

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INTRODUCTION

The obesity is a chronic disease characterized by the excessive accumulation of fatty tissue in the body. Its prevalence has increased rapidly in the last decades and the related costs has reached billions of dollars (SEGAL & FANDIÑO, 2002; CHENOWETH, & LEUTZINGER, 2006).

For determination of the obesity degrees, Lima and Sampaio (2007) has used a classification adopted by the American Society of Bariatric Surgery, which possesses a larger number of cut points in relation to NAASO/NHLBI, Latin-American Consensus of Obesity and WHO, mainly with three categories that include BMI greater than 40 Kg/m². The following denominations are proposed: small obesity (BMI 27 - 30 Kg/m²); moderate obesity (BMI 30 - 35 Kg/m²); serious obesity (BMI 35 - 40 Kg/m²); morbid obesity (BMI 40 - 50 Kg/m²); super-obesity (BMI 50 - 60 Kg/m²) and super/super-obesity (BMI> 60 Kg/m²).

The bariatric surgery has been seen as the only technique capable to promote an accentuated/susteined weight loss. The indication to this intervention has increased, but the accomplishment is conditioned to a wide analysis of the multiple aspects, as the frustrated attempt of weight loss by the conventional methods, psychological status, nutritional profile, risk behaviors selection of smoke, alcoholism, and drugs and clinical selection (FANDIÑO, BENCHIMOL, COUTINHO, APPOLINÁRIO, 2004). Another established criterion for the accomplishment of the surgery related to the BMI is the necessit of a BMI higher than 40 kg/m² or higer than 35 kg/m^2 accompanied of comorbidities (SANCHES et al, 2007).

The surgical intervention presents as main advantages the accentuated weight loss (40 to 50% of the weight excess), the maintenance of that state in the medium and long periods and the rate of comorbidities resolution, as diabetes, hypertension, joint pain, sleep apnea, gastroesofagic reflux (SJOSTROM et al., 2004; GELONEZE and PAREJA, 2006). Besides, the surgery has been reducing the mortality rate for all the causes except for the external causes (accidents and suicide) (ADAMS et al, 2007).

In many cases, the sudden weigh loss lead to psychiatric complications, such as: depression, anxiety, alcoholism and compulsive shopping, among other situations (LOYAL & BALDIN, 2007). The most patients credits the treatment just to the surgical action, not taking into account the necessity of cares that should be maintained for whole life. This is a decisive factor for the success of the treatment, being fundamental the attendance of a multiprofessional including dietician, psychologist, physian and kinesiologist.

One issue that causes great concerne is appointed by Repetto, Rizzolli, Casagrande (2008), it is about the complications on long-term. Usually the patients presents the most varied degrees of malnutrition, anemias and several hypovitaminoses, that very often could be avoided if the patient continues being accompanied closely by a multidisciplinar group during and mainly after the bariatric surgery. In this way, the aim of this study were to characterize the behavior of self-care presented by the patients submitted to the bariatric surgery among the years of 2000 and 2007, in the University Hospital of Maringá (UHM).

MATERIALS AND METHODS

A descriptive cross sectional study was accomplished. The population of that study was composed by all the patients that were submitted to the bariatric surgery among the years of 2000 and 2007 by the Unique System of Health (USH), in the University Hospital of Maringá (UHM). A sample of 30 patients was obtained by convenience means, from the 109 patients submitted to the surgical procedure.

The self-care evaluation of the patients was accomplished by phone inquiry, which included the following variables: sex; age; evolution of the weight; time of wait for accomplishment surgery; periodic exams accomplishment; used to filing the exams; use of alimentary supplements; use of medicines; physical activity practice; and satisfaction with the surgery.

The satisfaction with the surgery was evaluated by a likert scale that varied from 1 to 5, where 1 (one) represented a very unsatisfied sensation and 5 (five) a very satisfied sensation. In relation to the physical activity were considered the practice of physical activity in the leisure time. The current weight was verified through the patient self-related. The height for the calculation of the body mass index (BMI), calculated by the formula BMI = weight/height², was obtained by the patients' handbook. The same procedure were used to obtained the time of wait for the accomplishment of the surgery. The other variables were appraised dichotomical as (yes/no).

The statistical analysis involved measures of central tendency (average and standard deviation), and when pertinent was used a descriptive statistics (frequency and percentile). The normality of data distribution was evaluated by Kolmogorov-Smirnov test. For dependent samples were used non parametric tests (Wilcoxon) and for independent (Mann Whitney). For independent samples with parametric test was used test student t. The data were organized in spreadsheet Excel for Windows and analyzed in the statistical package SPSS 14.0.

The present study followed all the ethical research issues and were approved by the Committee of Ethics in Research of the State University of Maringá (UEM) that were recorded by the number 318/07.

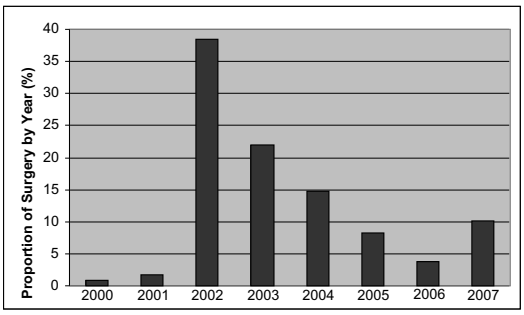
RESULTS AND DISCUSSIONS

The population of that study was composed by 109 patients that were submitted the bariatric surgery by the Unique System of Health, the University Hospital of Maringá (UHM). Among these, 89 were resident in Maringá-PR, 4 were from cities near to Maringá (less than 30 km from Maringá) and 16 were residents more than 30 km from Maringá.

In relation to the year of accomplishment of the surgical procedure, the Graph 1 presents the distribution of the number of surgeries in the analyzed period. In the first year observed (2000), 0,92% were operated, while 1,83% underwent the surgery on the following year. In the year 2002, were held almost 40% of all surgeries, reaching high levels when compared to the years that include 2000 to 2007. Among the years of 2002 and 2006 there were a accentuated decrease in the amount of

surgeries accomplished in Maringá-PR. This trend were in oposition to the data observed in the literature (SANTOS et al, 2008; SHIKORA, KIM e TARNOFF, 2007).

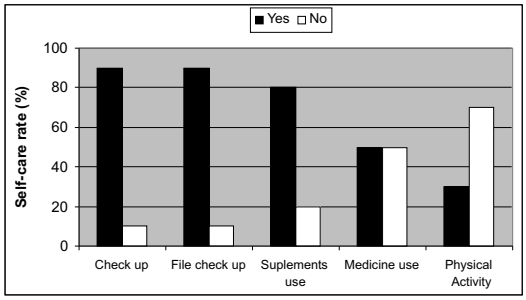
Shikora, Kim e Tarnoff, (2007), reported an increase of 600% in the number of surgeries in the last years. In Brazil the data are still more alarming, in agreement with the study accomplished by Santos et al, (2008), the number of bariatric surgery accomplished by the Unique System of Health increased more than 4.000% in a period of 8 years (1999-2006).



Graphic 1. Proportion of surgeries performed each year.

For the accomplishment of this study were located 30 patient, among which 27 were female and 3 masculine. The average age of the patients' were 40,77(±10,8) years, and the time of wait were 4,37(± 1,8) years. In relation to the satisfaction degree, most, 66,6% considered the surgery very satisfactory, while 26,6% of the patients are satisfied, and only 6,6% indicated some dissatisfaction degree.

The graph 2 presents the patients' distribution in relation to the self-care after the surgery. The accomplishment of periodic exams (check up) and the maintenance of those results in file reported by 90% of the patients that underwent the surgical procedure. On the other hand, it were verified that 70% of these patients didn't practice physical activity regularly. The use of drugs (medicine) was reported by 50% of the patientes, while the use of dietary supplements was indicated by 80% of the patients.



Graph 2. Self-care prevalence among the patients.

The accomplishment of exams periodically demonstrates that most of the patients tries to follow the medical orientations in the after-surgical period. This behavior is essential to avoid eventual complications, that in agreement with Carlini (2001), should take a more rigid control in regard to metabolic disorders related with vitamins and minerals absorption. Such statement is corroborated by Gemmel et al (2008) and Marinella (2008), which affirm that there is a great risk of vitamin D, calcium, iron and phosphate deficiencies after the bariatric surgery (VON MACH et al, 2004). In this way, the use of dietic supplements is important to decrease the consequences of that treatment.

The accomplishment of a regular physical activity is basic for the increment and the maintenance of the cardiorespiratory fitness that is strongly associated with reduction of cardiovascular diseases and with the relative risk of death (BLAIR et al, 1995; WEI et al, 1999). Facing it, the physical activity practice should also be included in the routine of those patient, because they showed high rates of physical inactivity. Therefore, it is evident that the multiprofissional attendance of these patients can promote a behavior change in way to facilitate the incorporation of regular practice of physical activities as form of minimizing possible surgical complications, besides contributing in the improvement of the quality of life.

According to Repetto, Rizzolli, Casagrande (2008) the surgery is just one of the important stages, but no the essence of the treatment of the morbid obesity, being indispensable the attendance for multidisciplinary team for the success of the treatment.

The bariatric surgery promoted, in general, a significant weight reduction in the group from 114,5 (±15,5) to 74,1 (±8,6) (p <0,001). However, in the comparison of the weight among the groups (2000-2003 x 2004-2007) were not verified a significant difference. BMI was also significantly reduced 42,3 (±9,9) for 27,2 (±6,2) (p <0,001).

Those results demonstrate the effectiveness of the surgery in the process of loss weight. That is in consonance with the literature (SJOSTROM et al, 2004). The table 1 presents the mean values and the comparison between the groups and the moments.

Table 1. Weight evolution and wait time for completion the bariatric surgery (average and standard deviation).

Table 1. Weight evolution and wait time for completion the bariatric surgery (average and standard deviation).

Surgery Group between 2000-2003	Before-surgery	Present time
Weight	118,3 (ÿ14,6)*	75,9 (ÿ7,7)*
Height	1,64 (ÿ0,1)	--
BMI	44,25 (ÿ5,3)*	28,4 (ÿ3,2)*
Wait time	4,00 (ÿ1,5)	--
Surgery Group between 2004-2007		
Weight	110,7 (ÿ15,9)*	72,4 (ÿ9,4)*
Height	1,60 (ÿ0,1)	--
BMI	43,1 (ÿ6,1)*	27,9 (ÿ3,6)*
Wait time	4,7 (ÿ2,1)	--

* significant difference between the moments before and after the surgery (p<0,001), Wilcoxon test.

Although significant difference has not been observed among the time of wait for accomplishment of the surgical procedure, it can be observed that the time of wait for the surgery is lightly higher in the group operated among the years 2004-2007, suggesting that the demand for surgery has been increased in the last years. This fact is in accordance with the increase showed by Santos et al, (2008). Other important aspect that can be bold is the increase of the cost of the bariatric surgery, for the Unique System of Health.

The popularization of the bariatric surgery in Brazil seems to be a rendered phenomenon that it will demand a monitoring of the multidisciplinary team in the attempt from minimizing eventual problems associated with the surgery. It is very important to keep in mind that the parameter that we have to comparations are from countries that have profund cultural and social differences with our country, as Sweden and USA.

CONCLUSIONS

It can be concluded that the bariatric surgery is very effective in the weight and BMI reduction. However, the attendance of the multidisciplinary team in the postoperative period needs to be perfected to guarantee conditions to the patients to solemnity better self-care, what can contribute to the minimize the surgical consequences and improve the quality of life.

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Agradecimentos: A Fundação Araucária pelo Financiamento da pesquisa conforme Ato da Diretoria Executiva 046/2007.

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SELF CARE IN PATIENTS SUBMITTED TO THE BARIATRIC SURGERY: A CASE STUDY.

ABSTRACT

The aim of this study were to characterize the behavior of self-care presented by the patients submitted to the bariatric surgery among the years of 2000 and 2007, in the University Hospital of Maringá (UHM). A descriptive cross sectional study was accomplished. Of the 109 patients submitted the procedure, were located 30 patient, which answered to phone inquiry. The statistical analysis involved measures of central tendency, and when pertinent statistics descriptive were used, beyond accomplishment of non parametric tests and parametric for dependent and independent samples. The bariatric surgery promoted a significant weight reduction from 114,5 (±15,5) to 74,1 (±8,6) with p <0,001. BMI were also significantly reduced 42,3 (±9,9) to 27,2 (±6,2) p <0,001. In relation to the self-care 90% of the patients accomplish exams and filed them, on the other hand only 30% indicated to pratice physical activity regularly. The use of medicines were around 50% and only 20% don't make use of dietary supplements. It can be concluded that the bariatric surgery is very effective in the weight and BMI reduction. However, the attendance of the multidisciplinary team in the postoperative period needs to be more effective.

LA SOLENNITÉ DU SOIN OCCUPÉE DE PATIENT SOUMIS AU BARIÁTRIC CHIRURGIE: UNE ÉTUDE DE CAS LE RÉSUMÉ

L'objectif de ce travail était caractériser le comportement de solennité du soin occupée et l'évolution du poids des patient soumis au bariátric chirurgie parmi les années de 2000 et 2007, dans l'Hôpital Ecole de Maringá. Une étude descriptive a été accomplie, avec traverse observation. Des 109 patients soumis la telle procédure, ils ont été localisés 30 patients qui a répondu à téléphoner l'enquête. L'analyse statistique impliquée mesure de tendance centrale, et quand le statistique descriptif pertinent a été utilisé, excepté la réalisation d'épreuves aucun paramétrique et paramétrique pour les échantillons dépendants et indépendants. Les bariátric chirurgie ont encouragé une réduction considérable du poids de 114,5 (±15,5) pour 74,1 (±8,6) pour p <0,001. IMC en a aussi été réduit considérablement 42,3 (±9,9) pour 27,2 (±6,2) p <0,001. par rapport à la solennité du soin occupée 90% des patients accomplissent des examens et ils maintiennent les classés, en opposite seulement 30% font l'activité physique régulièrement, pendant que l'usage de médecines est dit par 50% d'eux, et 20% ne font pas usage de suppléments alimentaires. Il peut être conclu que le chirurgie bariátric est très efficace dans la perte du poids et réduction d'IMC. Cependant, l'assistance du multidisciplinar l'équipe dans la période postopératoire est a besoin d'être très important pour ameliorer la qualidad de vie du patient.

EL AUTO-CUIDADO DEL PACIENTES SOMETIDOS AL CIRURGIA BARIÁTRICA: UN ESTUDIO DE CASO RESUMEN

El objetivo del trabajo fue caracterizar la conducta de auto-cuidado y la evolución del peso de los pacientes sometidos al cirugía bariátrica entre los años de 2000 y 2007, en el Hospital Academical de Maringá. Fue ejecutado un estudio descriptivo con observación transversal. De los 109 pacientes sometidos al procedimiento, 30 de ellos fueron localizados y respondieron las preguntas por teléfono. El análisis estadístico involucró medidas de tendencia central, y cuando pertinente, la estadística descriptiva fue utilizada, además del realización de pruebas no paramétrico y paramétrico para muestras dependientes y independientes. La cirugía bariátrica promovió una reducción significante del peso de 114,5 (±15,5) para 74,1 (±8,6) para p <0,001. CMI también estaba significativamente reducido 42,3 (±9,9) para 27,2 (±6,2) p <0,001. En respecto a la relación de auto-cuidado, 90% de los pacientes logran los exámenes y los mantienen archivados, por otro lado sólo 30% hacen la actividad física regularmente, mientras el uso de medicinas se dice por 50% de ellos, y 20% no hacen uso de suplementos alimentarios. Puede concluirse que la cirugía bariátrica es muy eficaz en la pérdida de peso y reducción de CMI. Sin embargo, la asistencia del equipo multidisciplinar en el período postoperatorio necesita ser perfeccionada.

AUTO CUIDADO DE PACIENTES SUBMETIDOS À CIRURGIA BARIÁTRICA: UM ESTUDO DE CASO RESUMO

O objetivo deste trabalho foi caracterizar o comportamento de auto cuidado e a evolução do peso dos pacientes submetidos à cirurgia bariátrica entre os anos de 2000 e 2007, no Hospital Universitário de Maringá (HUM). Foi realizado um estudo descritivo, com observação transversal. Dos 109 pacientes submetidos a tal procedimento, foram localizados 30 pacientes, os quais responderam à inquérito telefônico. A análise estatística envolveu medidas de tendência central, e quando pertinente foi utilizada estatística descritiva, além da realização de testes não paramétricos e paramétricos para amostras dependentes e independentes. A cirurgia bariátrica promoveu uma redução significativa do peso de 114,5 (±15,5) para 74,1 (±8,6) para p<0,001. O IMC também foi reduzido significativamente 42,3 (±9,9) para 27,2 (±6,2) p<0,001. Em relação ao auto cuidado 90% dos pacientes realizam exames e os mantêm arquivados, por outro lado somente 30% fazem atividade física regularmente, enquanto que o uso de medicamentos é relatado por 50% deles, e 20% não fazem uso de suplementos alimentares. Pode-se concluir que a cirurgia bariátrica é muito eficaz na perda de peso e redução do IMC. Contudo, o acompanhamento da equipe multidisciplinar no período pós-operatório precisa ser aprimorado.