09 - INTERFERENCE OF PHYSICAL THERAPY INTERVENTION ON THE QUALITY OF LIFE OF WOMEN SUBMITTED TO MASTECTOMY SURGERY OR BREAST-CONSERVING THERAPY

GABRIELA MARINI; ANGÉLICA MÉRCIA PASCON BARBOSA
Universidade Estadual Paulista - UNESP, Marília-SP, Brasil
gabriela.marini@yahoo.com.br

Introduction

Cancer is a degenerative chronic illness, that presents a drawn out and gradual evolution, that can sometimes be interrupted. The illness relates to debilities and mutilations due to its power of dissemination that may cause significant damages to physical, psychological and aesthetic aspects (GUIRRO; GUIRRO, 2002).

World-wide in 2002, one registered six million deaths for cancer and ten million new cases. The incidence of cancer grows in Brazil as in the whole world, in a rhythm that follows population aging due to the increase of life expectancy. It is a direct result of the great global transformation of the last decades that has modified health situation of people because of the fast urbanization, new ways of life and new standards of consumption (BRAZIL, 2006a).

The breast cancer remains as the second more frequent type of cancer in the world and the first one between women (MAURICE, 1991). In Brazil, 2006 estimates showed that 472,050 new cases of cancer occurred, among these, 48,930 breast cancer, with a near risk of 52 cases to each 100 thousand women. In the State of São Paulo one estimates 15,810 of these new cases (BRAZIL 2006a).

The advancement of prevention awareness, early detection and modernization of treatment, brought as resulted the decline of mortality for breast cancer and took a greater number of women to valorize psychological and social factors and the quality of life (SALES et al., 2001; HELGESON; SNYDER; SELTMAN, 2004).

Thus, the breasts besides exerting their basic function: to nourish the newborn, play an excellent role on female sensuality and sexuality. In our society, the breast portrays the femaleness**,** aesthetic and affection symbol, therefore it is undeniable, the importance to the woman a mammary illness, followed many times by a mutilating treatment. Her life is affected in physical, sexual, psychological, social and professional scopes, implying in an enormous emotional load for the patient, their family, friends and all the professionals in charge of her whitewashing (WHELAN et al., 2000; KRISHNAN et al., 2001; MOREIRA et al., 2002).

For Marcelino et al. (2003) physical therapy approaches several aspects in breast cancer operated patients, and it follows since the postural and respiratory re-education, caution with the scar, physical conditioning until the prevention of lymphatic complications, not forgetting that these aspects are intrinsically linked to psychological aspects, that might be shaken. The physical therapy will facilitate the integration of the operated side to the remaining portion of the body and the return of daily life activities, thus the acceptance of her body will occur as well as the prevention of other complications.

The quality of life of these women is of basic importance and all the treatment must be performed, observing the prevention and minimization of complications that may interfere with physical and psychological welfare. Then, the physical therapy treatment represents a great ally in the search of this quality of life, and more studies need to be carried out in order to quantify the effectiveness of these treatments in the Brazilian population, once complications are still part of the outpatient routine (BERGMANN et al, 2000).

Thus, the general objective of this study was to evaluate the interference of the physical therapy intervention in the quality of life of women subjected to the surgery of mastectomy or breast-conserving therapy. The specific objectives were: to identify the profile of the women who subjected to the surgical treatment of breast cancer, to compare the quality of life of women that subjected to the physical therapy treatment after-mastectomy or breast-conserving therapy with women that were not subjected to the physical therapy treatment, and to compare the result of the quality of life between the women who undergone mastectomy with those who carried out breast-conserving therapy.

Method

The present work was approved by the Committee of Ethics in Research (“ Parecer” 3009/2006) of “ Universidade Estadual Paulista Júlio de Mesquita Filho, Marília-SP”, so that later collection and analysis of the data occurred.

Mastectomy or breast-conserving therapy was a transversal study with women subjected to mastectomy or breast-conserving therapy in the last five years, and registered data base at “Irmandade da Santa Casa de Misericórdia de Marília - SP” by previous authorization. All mastectomy or breast-conserving therapy subjected women were selected between December of 2001 the December of 2006, totalizing 113 women.

Of the initial population, 77 women, 68% of the population, who were inserted in the inclusion criteria, agreed with the research and had previously signed the Term of Free and Clarified Assent. The sample was divided in two groups, Group I 37 women who undergone physical therapy treatment, and Group II, 40 women who did not undergo physical therapy treatment after-surgery.

The exclusion criteria were women who subjected to surgery treatment of breast cancer for more than five years, cancer surgical treatment of bilateral breast, another surgical type for breast cancer but not mastectomy or breast-conserving therapy, presence of metastasis, cancer recurrence, current treatment with x-ray and chemotherapy and associated alterations like orthopedic, rheumatologic, respiratory, endocrinous and cardiac problems 30 days previous collection, that could interfere with the result of quality of life.

The collection of the data was initiated through evaluation form consisted of the data from general characteristics of patient and specific characteristics of the breast cancer. Later the women answered the questionnaire of quality of life Medical Outcomes Study 36 - Item Short-Form Healthy Survey (SF-36), translated and validated for the Portuguese language.

The general and specific characteristics of the participants to trace the profile of the sample were presented by percentile distribution. For the analysis of the SF-36 one used props up specific of the questionnaire. The comparisons of the quality of life were got by the test of Mann-Whitney by means of GraphPad Instat 4,3 program, Windows 2005, p= 0,05 considered the significant value.

Results

It was observed that predominant general characteristics both in group I and in group II were: age between 50 and 79 years (group I = 91,8%; group II = 80%), married (group I = 48,6%; group II = 55%), elementary educational level (group I = 43,2%;

group II = 40%), white (group I = 91,8%; group II = 92.5%), above normal weight (group I = 70,2%; group II = 67.5%), and did not undergo hormonal spare therapy (group I = 75,7%; group II = 80%).

The specific characteristics of the sample demonstrated: 90% of the people were at the day of the surgery between 50 and 79 years and there was not a statistically significant difference between group I and II (p=0,7225); the average time of postoperative at the moment of the collection of the data in group I was 3,1 years and in group II 3 years, without significant difference (p=0,7794); the surgery of mastectomy was performed in 67,5% of the women in group I and in 52,5% in group II; the mammary reconstruction was performed in 21,6% in group I and 16% in group II, without statistical difference (p=0,1642); regarding breast cancer hereditary, group I showed its presence, in 35,1%, and group II in 42,5%, without difference between the groups (p=0,5143); it did not have predominance of one of the sides right or left in cancer assailing, and there was not difference between the groups (p=0,7759); the distribution of the women as to the dominant side, was in group I 94,5% right-handed and in group II 95%, without difference between the groups (p=0,9372); in group I that underwent physical therapy treatment after the mastectomy or breast-conserving therapy, showed that 83.7% of the women started between immediate post-surgery and 2 months; and they remained under treatment for 5 months in average, and 24 months maximum and 1 month minimum.

Performed analysis of percentile difference of improvement between groups I and II showed in five sites that showed a significant difference that group I got higher score in average of 33,6 %, corroborating to be nearer to the best health status when compared to group II (Table I).

Table I - Score expression of questionnaire SF -36 in Group I (underwent physical therapy) and Group II (did not undergo physical therapy).

Sites	Group I Scoring average±dp	Group II Scoring average±dp	Value p
Functional Capacity	86,8±14,5	50,0±16,7	0,0001*
Physical aspects	87,1±18,5	33,0±34,9	0,0001*
Pain	74,8±22,4	49,0±27,5	0,0001*
EGS	80,9±14,3	70,6±20,5	0,0082*
Vitality	61,4±18,5	56,0±17,7	0,1886
Social Aspects	90,7±16,1	77,0±20,0	0,0015*
Emotional Aspects	78,3±33,7	68,5±42,0	0,2643
Mental Aspects	76,9±17,0	72,8±11,5	0,2081

* Reference value p?0,05

There was not a significant difference compared to the quality of life of mastectomized women when compared to the breast conserving therapy subjected ones in group I as in group II (Table II).

Table II - Comparison expression between t he quality of life of women who has undergone mastectomy and the women who has undergone breast -conserving therapy in Group I and Group

	Group I			Group II		
	Mastectomy Scoring Average±dp	Quadrantec Scoring Average±dp	Valor p	Mastectomy Scoring average±dp	Quadrantec Scoring Average±dp	Valor p
Functional Capacity	85,4±12,8	90,0±17,9	0,3769	47,6±18,3	52,6±14,7	0,3503
Physical aspects	84,2±20,6	93,3±11,5	0,1638	25,7±36,4	41,0±32,3	0,1687
Pain	74,4±25,1	75,6±16,2	0,8788	43,0±24,9	57,5±29,0	0,0990
EGS	81,9±10,6	78,9±12,7	0,4514	69,8±20,5	71,4±21,0	0,8135
Vitality	77,4±15,1	65,8±8,2	0,2423	52,3±17,7	60,0±17,7	0,1789
Social Aspects	91,9±16,5	88.4±15,5	0,5432	75,3±20,0	78,8±20,4	0,5768
Emotional Aspects	95,9±11,2	94,3±13,2	0,7071	68,5±43,5	65,7±44,2	0,8423
Mental Aspects	79,4±19,3	74,0±10,7	0,4691	72,3±11,3	73,3±12,0	0,8121

* Reference value p?0,05

Discussion

Women present psychological problems of adjustment related to the acceptance of the limits imposed by their disease, and have to understand their attitudes, in order to help them to accept their personality positive aspects (MATSUOKA et al., 2002). This literature confirms the findings of the present work, when one analyzes the emotional aspects of the questionnaire of quality of life, because even in the patients who subjected to the physical therapy treatment, these aspects showed bad quality of life scoring.

The data found in this study, which did not have difference in the quality of life among the women subjected to mastectomy and subjected the breast-conserving therapy disagrees with the results found by Engel et. (2004). On the other hand the same results are in agreement with the findings of Sales et al (2001) and Kieber et al (1991) where differences in the quality of life between groups were not shown, subjected to different types of surgical treatment.

Sugden et al.(1998), reported that half of the women subjected to the radical mastectomy for breast carcinoma presents limitation of at least one movement of the shoulder after surgery. As treatment followed women reported an improvement in operation. Box et al. (2002), reported that women who subjected to supervised exercises have significantly higher recovery in the amplitude of movement when compared to women who did not subjected to a physical therapy program.

The results are similar to the data presented by Mendes et al. (2004) and Okiyama et al (2000), that traced the profile of women with breast cancer subjected to mammary surgery and observed that the majority of women assailed by the illness was 51 to 60 years of age in average; they were married and they had poor education. However there are some results that disagree with these authors related to breast cancer heredity, that in this study did not present a relation in more than 60%; and related to the higher incidence side being the left, there was not a difference of incidence between the right and left breast in the occurrence of the cancer.

Conclusion

The profile of the women of Group I and Group II, based in the data of the general and specific characteristics, were similar, demonstrating in the total sample the following characteristics: current age and in the day of surgery between 50 and 79 years, married, elementary educational degree, white, above normal weight, did not undergo hormonal spare therapy, surgical type of mastectomy, without relation with hereditary, did not undergo mammary reconstruction, without predominance as to the side of the surgery, right-handed, and belonging to the group that performed physical therapy, the beginning of it occurred between immediate postoperative and 2 months and the women remained 5 months in physical therapy treatment in average.

There was a positive interference of physical therapy intervention in the quality of life of women subjected to the surgery of mastectomy or breast-conserving therapy in the city of Marília-SP.

The group that performed physical therapy treatment after-surgery, independent of the time of beginning and the time that remained in treatment, demonstrated a better quality of life in five of the eight sites of questionnaire SF-36, when compared to the group that did not perform physical therapy.

There was not a significant difference in the comparison of quality of life of mastectomized women when compared to the breast conservative therapy subjected ones.

References

BRASIL. Ministério da Saúde. Instituto Nacional do Câncer**. Estimativas da Incidência por Câncer**. Rio de Janeiro: INCA, 2006a. Disponível em:<http://www.inca.org.br>. Acesso em: 10 jan 2007.

HELGESON, V. S.; SNYDER, P.; SELTMAN, H. Pychological and physical adjustment to breast cancer over 4 year: Identfying distintict trajetrories of change**. American Psycnological Association**, New York, v.23, n.1- 3, p.3-15, 2004.

GUIRRO, R.; GUIRRO, E. **Fisioterapia Dermato Funcional: Fundamentos, Recursos e Patologias**. 3. ed. São Paulo: Manole Ltda, 2002.

BERGMANN, A.; MATTOS, I.E.; KOIFMAN, R.J. Morbidade após o tratamento para câncer de mama. **Fisioterapia Brasil**, v.1, n.2, p.101-108, 2000.

MARCELINO, D.R., et al. Atuação da fisioterapia em uma paciente submetida à tumorectomia. **Fisioterapia Brasil**, Rio de Janeiro, vol 4, n.3, 2003.

MOREIRA, E. C. H.; PENASSO, P.; ASSAD, M. A. C. et al. Proposta de elaboração e validação de um questionário de qualidade de vida, específico para paciente submetida ao tratamento cirúrgico de câncer de mama. **Reabilitar**, São Paulo, v.4, n.14, p.43-48, 2002.

KRISHNAN, L.; STANTON, A. L.; COLLINS, C. A. et al. Form or function? Part 2. Objective cosmetic and functional correlates of quality of life in women treated with breast-conserving surgical procedures and radiotherapy. **Cancer**, New York, v.15, n.9- 12, p.2282-2287, jun. 2001.

SALES, C. A. C.; PAIVA, L.; SCANDIUZZI, D. et al. Qualidade de vida de mulheres tratadas de câncer de mama: funcionamento social. **Revista Brasileira de Cancerologia**, Rio de Janeiro, v.47, n.3, p.263-272, 2001.

WHELAN, T. J.; LEVINE, M.; JULIAN, J. et al. The effects of radiation therapy on quality of life of women with breast carcinoma. **Cancer**, v. 88, n. 10, p.2260-2266, may, 2000.

BOX, R.C; REUL-HIRCHE, H.M.; BULLOCK-SAXTON, S.E., et al. Shoulder movement after breast cancer surgery: results of randomized controlled study of postoperative physiotherapy. **Breast cancer Res Treat**, v.75, p.35-50, 2002.

ENGEL, J.; KERR, J.; SCHLESINER-RAAB, A.; et al. Quality of life following breast conserving therapy or mastectomy: results of a 5 year prospective study. **The Breast Journal**, v.10, n.3, p.223-231, 2004.

KIEBERT, G.N.; DE HAES, J.C.; VELDE, C. The impacto f breast cancer-conservation treatment and mastectomy on the quality of life early stage breast cancer pacients: a review. **J.Clin Oncol**, v.9, p.1059-70, 1991.

MATSUOKA, Y.; NAKANO, T.; INAGAKI, M. et al. Cancer-related thoughts as an indicator of poor psychological adjustment at 3 or more years after breast surgery: a preliminary study. **Breast Cancer Research and Treatment**, Dordrecht, v.76, n.2, p.117-124, nov. 2002.

MENDES, A.V.; PINTO, J.B.; FABRÍCIO, R.A.O.S.; et al. Perfil de mulheres submetidas à cirurgia mamária no hospitall geral de Taubaté - São Paulo. **Fisioterapia Brasil**, v.5, n.6, nov/dez, 2004.

OKIYAMA, C.M. et al. Caracterização de mulheres com câncer de mama atendidas no ambulatório de Mastologia do HSP/UNIFESP. **Acta Paulista de Enfermagem**, v.13, n.especial, p. 209-211, 2000.

SUGDEN, E.M, REZVANI, M.; HARRISON, J.M; HUGHES, L.K; Shoulder movement after the treatment of early stage breast cancer. **Clinical Oncology**, v.10, p.173-81, 1998.

Av.Universitária, 2447
Jardim Flamboyant, Botucatu-SP
CEP 18608-031
Tel: (14) 38144838
E-mail: gabriela.marini@yahoo.com.br

INTERFERENCE OF PHYSICAL THERAPY INTERVENTION ON THE QUALITY OF LIFE OF WOMEN SUBMITTED TO MASTECTOMY SURGERY OR BREAST-CONSERVING THERAPY

ABSTRACT

This study aimed at evaluating the interference of physical therapy intervention on the quality of life in mastectomized women or under breast-conserving therapy ones, to compare the result of the quality of life between women who underwent physical therapy (Group I) with those who had not undergone (Group II), as well as between the ones subjected to mastectomy with the ones subjected to breast-conserving therapy, and to identify the profile of the women subjected to of breast cancer surgical treatment. An evaluation form to collect general and specific data and the questionnaire of quality of life SF-36 were used. The results showed that there was a positive interference of the physical therapy treatment in the quality of life of these women. Group I independent from the beginning time and the time that it remained under treatment, showed a significant better quality of life in five of the eight components of questionnaire SF-36, when compared to Group II. It did not have significant difference compared to the quality of life of mastectomized women when compared to breast-conserving therapy. The profile of the women in Group I and Group II were similar, demonstrating the following characteristics: present age and at the date of the surgery

between 50 and 79 years, married, elementary degree, white, above normal weight, have not carried hormonal spare therapy, surgical type of mastectomy, without relation with hereditary succession, have not undergone mammary reconstruction, without predominance as to the side of the surgery, right-handed, and in Group I the women remained 5 months in physical therapy treatment on average.

KEY-WORDS: Physical therapy. Mastectomy and Breast-conserving therapy. Quality of life.

INTERFÉRENCE DE L´ INTERVENTION PHYSIOTHÉRAPEUTIQUE DANS LA QUALITÉ DE VIE DE FEMMES SOUMISES À LA CHIRURGIE DE MASTECTOMIE OU DE QUADRANTECTOMIE.

RÉSUMÉ

Cette étude a eu par buts : évaluer l´interférence de l´intervention physiothérapeutique dans la qualité de vie chez des femmes mastectomisées ou quadrantectomisées ; comparer la qualité de vie parmi les femmes qui ont réalisé de la physiothérapie (GroupeI) et celles qui n´en ont pas réalisé (Groupe II), aussi bien que parmi celles qui ont été soumises à la mastectomie et celles qui ont été soumises à la quandrantectomie ; les profils de ces deux Groupes ont été identifiés.

Une fiche d´évaluation et le questionnaire de qualité de vie SF-36 ont été utilisés pour la rassemblée des données générales et spécifiques. Les résultats ont prouvé qu´il y a eu de l´interférence positive de l´intervention physiothérapeutique dans la qualité de vie de ces femmes là. Le Groupe I a démontré une meilleure qualité de vie dans cinq des huits champs du questionnaire SF-36, confronté avec le Groupe II, indépendement du moment où il a commencé le traitement et de la durée de ce traitement. Il n´y a pas eu de difference significative dans la comparaison de la qualité de vie des femmes mastectomisées, si mise en comun avec de celles qui ont été quadrantectomisées. Le profil des femmes du Groupe I et celui du Groupe II étaient semblables, en ayant été indiquées les caracteristiques suivantes : l´âge actuelle, et au moment de la chirurgie, entre 50 et 79 ans, mariées, niveau d´étude lycéen, blanches, au dessus du poids normal, n´ayant pas réalisé de la thérapie de remplacement hormonal, type chirugique de mastectomie sans rapport avec l´hérédité, n´ayant pas réalisé de la reconstruction mammaire, manque de prédominance par rapport au côté de la chirurgie, dextres. Dans le Groupe I, le début de la physiothérapie a eu lieu entre la période postopératoire immédiate et 2 mois, en étant restées environ 5 mois en traitement physiothérapeutique.

MOTS-CLéFS: Physiothérapie. Mastectomie et Quadrantectomie. Qualité de vie

INTERFERENCIA DE LA INTERVENCIÓN FISIOTERAPÉUTICA EN LA CALIDAD DE LA VIDA EN MUJERES SOMETIDAS A LA CIRUGÍA DE MASTECTOMÍA O A CUADRANTECTOMÍA.

RESUMEN

Este estudio tuvo por objetivo: evaluar la interferencia de la intervención fisioterapéutica en la calidad de vida en mujeres mastectomizadas o cuadrantectomizadas, comparar la calidad de vida entre las mujeres que hicieron fisioterapia (grupo I) con las que no lo hicieron (grupo II), así como entre las sometidas a mastectomía con las sometidas a cuadrantectomía e identificar el perfil de esta población. Se utilizó una ficha técnica de evaluación para la colecta de dados generales y específicos y el cuestionario de calidad de vida SF-36. Los resultados evidenciaron que hubo interferencia positiva de la intervención fisioterapéutica en la calidad de vida de estas mujeres. El grupo I independientemente del tiempo en que inició y del tiempo en que permaneció en tratamiento, demostró una mejor calidad de vida en cinco de los ocho dominios del cuestionario S-F 36, cuando comparado con el grupo II. No hubo diferencia en la comparación de la calidad de vida de mujeres mastéctomizadas cuando comparada con las cuadrantéctomizadas. El perfil de las mujeres del grupo I y grupo II fue semejante, demostrando las siguientes características: edad actual y en la fecha de la cirugía entre 50 y 79 años, casadas, enseñanza primaria, blancas, arriba del peso normal, no relacionaron terapia de reposición hormonal, tipo quirúrgico de mastectomía, sin relación con hereditariedad, no relacionaron reconstrucción mamaria, no predominancia a lo que se relaciona a la cirugía, diestras, y en el grupo I, el inicio de la fisioterapia ocurrió entre el postoperatorio inmediato y 2 meses y permanecieron 2 meses en tratamiento fisioterapéutico.

PALABRAS CLAVE: fisioterapia mastectomía y cuadrantéctomia. Calidad de vida.

INTERFERêNCIA DA INTERVENçãO FISIOTERAPêUTICA NA QUALIDADE DE VIDA DE MULHERES SUBMETIDAS à CIRURGIA DE MASTECTOMIA OU QUADRANTECTOMIA .

RESUMO

Este estudo teve por objetivos: avaliar a interferência da intervenção fisioterapêutica na qualidade de vida em mulheres mastectomizadas ou quadrantectomizadas, comparar a qualidade de vida entre as mulheres que realizaram fisioterapia (Grupo I) com as que não realizaram (Grupo II), bem como entre as submetidas a mastectomia com as submetidas a quadrantectomia, e identificar o perfil desta população. Utilizou-se uma ficha de avaliação para coleta dos dados gerais e específicos e o questionário de qualidade de vida SF-36. Os resultados evidenciaram, que houve interferência positiva da intervenção fisioterapêutica na qualidade de vida destas mulheres. O Grupo I independente do tempo que iniciou e do tempo que permaneceu em tratamento, demonstrou significativa melhor qualidade de vida em cinco dos oito domínios do questionário SF-36, quando comparado com o Grupo II. Não houve diferença significativa na comparação da qualidade de vida de mulheres mastectomizadas quando comparada com as quadrantectomizadas. O perfil das mulheres do Grupo I e Grupo II foram semelhantes, demonstrando as seguintes características: idade atual e na data da cirurgia entre 50 e 79 anos, casadas, nível educacional de I grau, brancas, acima do peso normal, não realizaram terapia de reposição hormonal, tipo cirúrgico de mastectomia, sem relação com hereditariedade, não realizaram reconstrução mamária, não predominância quanto o lado da cirurgia, destras, e no Grupo I, o inicio da fisioterapia ocorreu entre o pós-operatório imediato e 2 meses e permaneceram em média 5 meses em tratamento fisioterapêutico.

PALAVRAS-CHAVE: Fisioterapia. Mastectomia e Quadrantectomia. Qualidade de vida.