130 - GLOBAL POSTURAL RE-EDUCATION IN PATIENT SUBMITTED TO MODIFIED RADICAL MASTECTOMY

LIAMARA CAVALCANTE DE ASSIS; ANGÉLICA MÉRCIA PASCON BARBOSA. FACULDADE DE MEDICINA DE BOTUCATU - UNESP BOTUCATU - SÃO PAULO - BRASIL liamaracavalcante@gmail.com

INTRODUCTION

According to the World Health Organization, breast cancer is defined as being a malign tumor located in the breast, as a result of a series of alterations in the genes that control the growing and the cellular behavior, happening the tumor when these cells multiply in an uncontrolled way, due to an abnormality in these genes^{1,2}.

The incidence of breast cancer has grown all over the world, turning this illness into one of the biggest public health problems and one of the main causes of death by cancer among women^{3,4}.

Among the therapeutic modalities, surgery is included. Surgeries are classified as conservative when a resection of a breast segment is made, and quadrantectomy, sectorectomy and tumorectomy are included. The non-conservative surgeries include the simple, the radical, the radical modified mastectomies, and the mastectomies with immediate reconstruction.⁴.

Several authors describe the complications post-mastectomy, and these can occur right after the surgical act or develop through the years. It can be cited: the scar adherences, the weakness in the superior limb involved, the postural deviations, the winged scapula, the edema, lymph edema and pain. These complications also generate psychological complications, such as the reduction of self-esteem, anxiety, depression, problems with body image and social acceptance^{1,2,4,5}.

When a mastectomy is carried out, there is a change in the body image which determines feelings of insecurity, including shame of the woman's own body^{6,7}. This leads to a protective attitude of disguising the absence of a breast, possibly also bringing about serious posture alterations⁸. Still about this, it is noticed that not only the physical alterations provoke emotional alterations, but the they provoke those, as in a cycle^{9,10}.

The Global Postural Re-education® (GPR®) is defined as the carrying out of active and consecutive, isotonic eccentric postures of the muscles of static, with maintenance of the dynamic muscles. It starts from the consequence to the cause of the problem, seeking to find the good morphology again and solving the problem linked to this morphology^{6,10}.

In the mastectomy, the shoulder is the most commonly harmed joint due to prolonged imobilization¹¹. There are complications such as deficiency of the shoulder joint, weakness in the resistance of shaking/holding hands or resistance of the scapular waist, rigidity of the shoulder, postural changes, pain in the arm siding the surgery, including numbness of the superior limb. There are symptoms associated to fear, anxiety, depression and fatigue¹².

OBJECTIVE

The general objective of this work was to verify the efficacy of GPR® by the Method Souchard in a patient submitted to modified radical mastectomy of the left breast.

METODOLOGY

Longitudinal clinical study, which counted on the participation of a woman submitted to modified radical mastectomy of the left breast, who, after being informed about the objectives and procedures of the same, signed the Term of Free and Clear Consent approved by the Committee of Ethics in Research (CER).

After 4 months of surgery, the patient was evaluated by the principles of GPR® and the treatment was initiated. The patient was photographed in the first and last appointment, so that it was possible to verify and analyze the evolution.

The evaluation consisted of: evaluation sheet, goniometry for amplitude of movement (AOM); and postural evaluation sheet.

The protocol of treatment was individual with frequency of 2 times per week, for 8 sequent weeks, summing up 16 appointments, of about 50 minutes of duration each appointment.

Based on the evaluation and the patient's complaints, three postures were used: frog on the floor with closed arms (O/C), frog on the floor with open arms (O/O) and frog in the air with open arms (C/O).

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The first posture carried out (O/C) was used as an objective of working the thoracic expansion, correct scoliosis, extend the superior shoulder chain, breathing chain and the anterior arms chain. It is the posture to work the decompression and manual ability, allowing us to insist towards the thorax and the respiration, and the shoulders, unrolling and bringing them down.

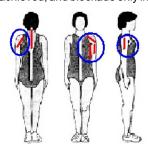
The second posture carried out (O/O) was used with the same objective as the first one, adding extending the anterior-internal shoulder chain, giving bigger insistence towards the chest and big dorsal, which have direct relation when opening the arms, and the sub scapular for gaining external rotation and traction.

The third posture carried out (C/O) was used in the last appointments, after the patient account bigger difficulty in abducting and/or elevating the SL in the seated position.

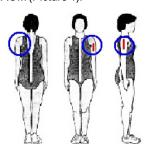
RESULTS

In the first appointment, the patient accounted pain in dorsal and cervical region, middle edge of the left scapula, anterior and side face of the arm, anterior and posterior region of the shoulder, left side region of the trunk, and in the ribs. Also a big blockade met in the shoulder joint and in the thoracic box in the left hemi body (Picture 3).

As for the last appointment, we met light pain, although only when carrying out the movements beyond the AOM already achieved, and blockade only in the shoulder region, hindering the complete AOM (Picture 4).



Picture 3 - Areas of pain (red) and blockade (blue) met in the first appointment.



Picture 4 - Areas of pain (red) and blockade (blue) met in the last appointment.

In the 1st evaluation, we came across a woman who presented for AVS 10 in pain, totally dissatisfied with her limitations. In the last evaluation, the patient presented a scale of 3, that is, a moderate pain, but already showing herself more satisfied.

In the AOM, we met a great limitation and blockade in movements of flexion and abduction of shoulders in the 1st evaluation, with 90° of flexion and 40° of abduction. In the last evaluation we come across a woman who shows 160° of flexion and 65° of abduction

In the initial postural evaluation we find: head aiming forwards, look down, shoulders rolled transversely and vertically, convex dorsal scoliosis towards left, dorsal rectification, lumbar hyperlordosis to the level of L4-L5, hips in retrovertion, irregular knees and in internal rotation, irregular calcaneus.

In the initial photograph registers we can observe a great retraction of scalenes, sternocleidomastoids and superior trapezius, winged scapula. We also observe that when carrying out the abduction of shoulders, the elevation of the same occurs, the head aims frontally and down, joint and breathing blockade, and increase of scoliosis. When carrying out the movement of flexion, the head aims down, the left shoulder also elevates, and there are blockades too.

In the final postural evaluation we find: aligned head, look towards horizon, shoulders with transversal rolling, convex dorsal scoliosis towards left, dorsal rectification, hips in retraction irregular knees and in internal rotation, irregular calcaneus.

In the final photograph registers we can observe that when carrying out the movements, the head keeps in position, the scoliosis does not increase and the shoulder does not elevate, but a joint blockade is still present.

Analyzing the photograph registers, we saw that the patient presented great compensations and joint blockade when carrying out movements of flexion and abduction of the LSL, besides the found pain. The absence of movement of the ribs cage and breathing blockade in the left side were also clear.

Comparing both moments of the images, we have a better AOM, with reduction of the joint blockade, alignment of the shoulders, and a very significant improvement of the thoracic expansion.













Anterior and Posterior look in the 1

Anterior and posterior look in appointment 16th appointment

Abduction in the 16th appointment











Flexion in the 16th appointment



Flexion in the 1^{rt} appointment





Side look in the 1^{rt} appointment

Side look in the 16th appointment

DISCUSSSION

The diagnosis of the existence of a breast cancer brings about a great psychic instability, as well as alters the psychosocial dynamism of oneself and the living with others 13.

The consequences of the everyday Global Postural Re-education® for individuals who carried out breast surgery have effects in various functions of the organism, such as the breathing, the maintenance or gaining of amplitude of movements, improvement in the body awareness, and control of the situations of psychological alterations 13

The automatic system replies to the aggressions suffered in a modulated way, in order to maintain the vital functions. So, considering the surgical procedure carried out and the carrying out of chemotherapy, there was a series of compensations in order to maintain these functions ¹⁰.

To fill in the absence of the smaller and/or the bigger breast muscle, Kapandji (2000) cites that other muscles of the thorax, cervical region and scapular waist will be, in a certain way, overloaded in their physiological actions, as we could see in the patient. It is noticed that the post-surgical muscular alterations are also related, for instance: in this case, to the muscular shortage and to the postural alterations, because the arising of one of the complications favors or enlarges the other one.

The surgical incision pain is a factor that alters all the breathing mechanics. Fearing, the patient does not appropriately immobilize the thoracic box. In this scope, the GPR® postures, in the expiratory insistence, there is an improvement in the air draft, decreasing the probability of occurring other lung problems after the mastectomy¹⁴.

CONCLUSIONS

The treatment of the patient submitted to modified radical mastectomy, by GPR® by the method Souchard, significantly decreased the complaint of pain, significantly increased the AOM of the shoulder and without great compensations and improved the posture when compared to the posture previous to the GPR intervention.

Some non-measurable aspects and which were not objects of this study, but were detected through this research, deserve to be highlighted for being relevant according to accounts of the patient of the study.

The patient accounted that after initiating the treatment with GPR®, her self-esteem improved a lot, she learned to breath and relax, showing more calmness: "my head is a new one, I even smile".

She also accounted that after the appointments, she relaxed so much that she slept for hours later, and the same happened when she practiced breathing at home. And that this was extremely important before and after carrying out chemotherapy.

The patient showed a great limitation to the movements because of fear factors, joint blockade and a high level of pain, being all of those related to the surgery and to the time of immobilization of the LSL. In the last appointment the freedom of movement acquired was remarkable.

We saw that the patient had significant improvements, but that it is necessary to continue the treatment, so that the rehabilitation can be more complete.

By using these benefits, it is noticed the necessity of more experimental studies, to quantify the results and this way ratify the gains acquired with the intervention of GPR®. Thus, the method can be applied to promote a body re-education in patients who carried out breast surgery, without presenting absolute contraindications, respecting the post-surgical recovering process of the individual as long as a fully-fledged professional carries out this procedure.

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Rua Almirante Barroso, nº 754, Centro, CEP: 19800-000 Assis - São Paulo - Brasil liamaracavalcante@gmail.com

GLOBAL POSTURAL RE-EDUCATION IN PATIENT SUBMITTED TO MODIFIED RADICAL MASTECTOMY ABSTRACT

The incidence of the breast cancer has been increasing everywhere in the world, making this disease one of the largest public health problems. In most of the cases, the surgical treatment is indicated. There are several complications post-mastectomy, among them the pain, the postural deviations and the joints blockades. GPR is a method of postural re-education that aims to treat pathologies that require physical therapy, such as joint, traumatic and breathing problems. The objective of this work was to verify the effectiveness of Global Postural Re-education® in a patient submitted to modified radical mastectomy. A woman participated in this study submitted to modified radical mastectomy of the left breast. The patient was photographed frontally, in profile and back, in the first and in the last appointment. In the first appointment, the patient presented for EVA 10 in pain, totally dissatisfied with the limitations, and great blockade in the joint of the shoulder and in the thoracic box in the left hemi body, with 90° of flexion and 40° of abduction. In the last appointment, we found EVA 3 in pain, however just when carrying out the movements beyond AOM accomplished already, and blockade only in the area of the shoulder, but already showing herself more satisfied, with 160° of flexion and 65° of abduction. Comparing the two moments of the images, we have a better AOM, with reduction of the joint blockade, alignment of the shoulders, and a very significant improvement of the thoracic expansion. The treatment reduced the complaint of

pain, increased AOM of the shoulder significantly without great compensations and improved the posture when compared to the posture previous to the intervention of GPR.

KEY WORDS: posture, mastectomy, GPR

RÉÉDUCATION DE LA POSTURE GLOBALE DANS UNE PATIENTE SOUMISE À LA MASTECTOMIE RADICALE MODIFIÉE.

RÉSUMÉ

L'incidence du cancer de poitrine a augmenté dans toutes les parties du monde, faisant de cette maladie l'un des plus grands problèmes de santé publique. Dans la plupart des cas, le traitement chirurgical est indiqué. Ce sont plusieurs les complications post-mastectomie, d'entre elles la douleur, les détours de posture et les blocus articulaires. RPG est une méthode de rééduction de posture qui a pour objectif le traitement des pathologies qui exigent physiothérapie, comme des problèmes articulaires, traumatiques et respiratoires. L'objectif de ce travail a été vérifier l'efficacité de la Rééducation de Posture Globale dans une patiente soumise à la mastectomie radicale modifiée. Une femme soumise à la mastectomie radicale modifiée de la poitrine gauche a participé de cet étude. La patiente a été photographié par devant, profil et des côtes, dans la première et la dernière consultation. Dans la première consultation, la patiente présentait par EVA 10 en douleur, totalement insatisfaite avec les limitations, et grand blocus dans l'articulation de l'épaule et dans la boîte thoracique dans l'hemicorps gauche, avec 90 degrés de flexion et 40 d'abduction. Dans la dernière consultation, nous trouvons EVA 3 en douleur, mais seulement à réaliser les mouvements outre ADM déjà conquise, et blocus seulement dans la région de l'epaule, mais en se présentant déjà plus satisfaite, avec 160 degrés de flexion et 65 d'abduction. En comparant les deux moments des images, nous avons une meilleure ADM, avec réduction du blocus articulaire, alignement des épaules, et une amélioration très significative d'expansivité thoracique. Le traitement a diminué la plainte douleur, a augmenté significativement l'ADM de l'épaule sans grandes compensations et a amélioré la posture quand comparée avec la posture préalable à l'intervention de RPG.

MOTS-CLES: posture, mastectomie, RPG.

POSTURALES MUNDIAL DE REEDUCACIÓN EN EL PACIENTE PRESENTADO A LA MASTECTOMÍA RADICAL MODIFICADA

RESUMEN

Los índices del cáncer de mama han aumentado en todo el mundo, haciendo de esta enfermedad uno de los principales problemas de la salud pública. En la mayoría de los casos, el tratamiento quirúrgico es el indicado. Son varias las complicaciones tras la mastectomía, entre ellas el dolor, los desvíos de postura y los bloqueos en las articulaciones.

El RPG es un método de reeducación de postura cuyo objetivo es tratar patologías que requieren de fisioterapia, como problemas en las articulaciones, traumáticos y respiratorios.

El objetivo de este trabajo fue analizar la eficacia de la Reeducación Postural Global en una paciente sometida a una mastectomía radical modificada. Participó en este estudio una mujer sometida a una mastectomía radical modificada en la mama izquierda. La paciente fue fotografiada de frente, perfil y de espaldas en la primera y última consulta. En la primera, la paciente presentaba por la EVA 10 en dolor, totalmente insatisfecha con las limitaciones, y un grande bloqueo en la articulación del hombro y en la caja torácica en la mitad izquierda del cuerpo con 90° de flexión e 40° de extensión. En la última consulta y reconocimiento, encontramos EVA 3 en dolor solamente al realizar los movimientos además de la ADM ya conseguida, y bloqueo sólo en la zona del hombro, pero presentándose más satisfecha, con 160° de flexión e 65° de extensión. Comparando los dos momentos de las imágenes, tenemos una mejor ADM, con reducción del bloqueo articular, alineamiento de los hombros, y una mejora muy significativa de la expansión torácica. El tratamiento disminuyó la queja del dolor, aumentó significativamente la ADM del hombro sin grandes compensaciones y mejoró la postura en relación a la anterior a la intervención de la RPG.

PALABRAS CLAVE: postura, mastectomía, RPG

REEDUCAÇÃO POSTURAL GLOBAL EM PACIENTE SUBMETIDA A MASTECTOMIA RADICAL MODIFICADA RESUMO

A incidência do câncer de mama tem aumentado em todas as partes do mundo, fazendo desta doença um dos maiores problemas de saúde pública. Na maioria dos casos, o tratamento cirúrgico é indicado. São várias as complicações pós-mastectomia, entre elas a dor, os desvios posturais e os bloqueios articulares. O RPG é um método de reeducação postural que objetiva tratar patologias que requerem fisioterapia, como problemas articulares, traumáticos e respiratórios. O objetivo deste trabalho foi verificar a eficácia da Reeducação Postural Global® em paciente submetida a mastectomia radical modificada. Participou deste estudo uma mulher submetida a mastectomia radical modificada da mama esquerda. A paciente foi fotografada de frente, perfil e costas, no primeiro e no último atendimento. No primeiro atendimento, a paciente apresentava pela EVA 10 em dor, totalmente insatisfeita com as limitações, e grande bloqueio na articulação do ombro e na caixa torácica no hemicorpo esquerdo, com 90° de flexão e 40° de abdução. No último atendimento, encontramos EVA 3 em dor, porém apenas ao realizar os movimentos além da ADM já conquistada, e bloqueio apenas na região do ombro, mas já apresentando-se mais satisfeita, com 160° de flexão e 65° de abdução. Comparando os dois momentos das imagens, temos uma melhor ADM, com redução do bloqueio articular, alinhamento dos ombros, e uma melhora muito significativa da expansibilidade torácica. O tratamento diminuiu a queixa dor, aumentou significativamente a ADM do ombro sem grandes compensações e melhorou a postura quando comparada com a postura prévia à intervenção da RPG.

PALAVRAS CHAVE: postura, mastectomia, RPG.