CARE TO MASTECTOMY WITH AXILLARY LYMPHADENECTOMY, LYMPHEDEMA PREVENTION: AN INTEGRATIVE REVIEW

O CUIDADO À MASTECTOMIZADA COM LINFADENECTOMIA AXILAR, PREVENÇÃO DE LINFEDEMA: REVISÃO INTEGRATIVA

ATENÇÃO A LA MASTECTOMÍA CON LINFADENECTOMÍA AXILAR, LINFOEDEMA PREVENCIÓN: UNA REVISIÓN INTEGRADORA

Mariana Pereira Hamaji1, Fernando Henrique Sousa2, Vicente Alves de Oliveira Júnior3, Carla Aparecida Pinto de Sousa4, Fernando Rocha Oliveira4, Vitor Engrácia Valentí5

ABSTRACT

Objective: to examine the care provided to women affected by breast cancer and who has performed axillary lymphadenectomy. Method: integrative review conducted in the databases LILACS and PubMed between 2000 and 2012, leaving the question << What care is provided to prevent lymphedema in women who underwent lymphadenectomy? >>. Resulting in 18 articles, analyzed under the following variables: author, title, methodology, year, journal, goal, prevention and control of lymphedema therapies and adherence to rehabilitation. Results: three categories are identified for rehabilitation of patient: prevention and control, therapies and adherence. Conclusion: preoperative is poorly addressed by; emphasizes the importance of home visits as part of rehabilitation, which is effective with the accession of the patient who needs information for its follow-up, no need for a guideline for this type treatment. Descriptors: Excision of Lymph; Breast Neoplasms; Rehabilitation; Women's Health; Nursing Care.

RESUMO

Objetivo: analisar os cuidados prestados à mulher acometida por câncer de mama e que tenha realizado linfadenectomia axilar. Método: revisão integrativa realizada nas bases de dados LILACS e PubMed, entre 2000 e 2012, partindo da questão «Quais cuidados são prestados para evitar linfedema em mulheres que realizaram a linfadenectomia?>> resultando em 18 artigos, analisados sob as variáveis: autor, título, metodologia, ano, revista, objetivo, prevenção e controle do linfedema, terapias e adesão à reabilitação. Resultados: identificou-se três categorias para a reabilitação da paciente: prevenção e controle, terapias e adesão. Conclusão: o pré-operatório é pouco abordado pela equipe; ressalta-se a importância da visita domiciliar como parte da reabilitação, sendo esta efetiva com a adesão da paciente, que necessita de informações para seu seguimento; há necessidade de um guia para este tipo de tratamento. Descriptors: Excisão de Linfonodo; Neoplasias da Mama; Reabilitação; Saúde da Mulher; Cuidados de Enfermagem.

RESUMEN

Objetivo: analizar la atención a las mujeres afectadas por cáncer de mama y que ha realizado la linfadenectomía axilar. Método: revisión integradora realizada en las bases de datos LILACS y PubMed entre 2000 y 2012, dejando la pregunta << ¿Qué atención se proporciona para prevenir el linfedema en mujeres que se sometieron a la linfadenectomía >> resultando en 18 artículos, analizados en las siguientes variables: Autor, el título, la metodología, el año, la revista, el objetivo, la prevención y el control de las terapias linfemática y la adherencia a la reabilitación. Resultados: tres categorías se identifican para la rehabilitación del paciente: prevención y control, tratamientos y adherencia. Conclusión: preoperatorio es poco aborado por, hace hincapié en la importancia de las visitas domiciliarias como parte de la rehabilitación, que es eficaz con la adhesión del paciente que necesita la información para su seguimiento, sin necesidad de una guía para este tipo de tratamiento. Descriptors: Excisión de la Linfa; Los Tumores de Mama; La Rehabilitación; La Salud de la Mujer; La Atención de Enfermería.
INTRODUCTION

Breast cancer represents an important public health problem when we consider that in 2008, 23% of breast cancers were diagnosed. In Brazil, it is estimated to be approximately 52,680 new cases in 2012.1

For the surgical techniques and radiotherapy are available for locoregional treatment. The surgical procedure is determined on the classification of the tumor (TNM), it may be conservative (serorectomia, enlarged lumpectomy or quadrantectomy) with or without lymphadenectomy, in this case uses the technique of sentinel lymph node or non-conservative (mastectomy).2

In 64% of breast tumors smaller than 2 cm and in 42.3% of tumors 2-5 cm in diameter, axillary lymph node chain was free of metastatic involvement. Given this result it was concluded that lymphadenectomy in those cases would be avoided by decreasing the consequent comorbidities surgery.3 Major postoperative complications of axillary dissection early and late reported involve pain, seroma, infection, lymphedema, and sensory.4

The confirmation of the absence of axillary lymph nodes is given by sentinel lymph node biopsy. This method allows the study of the first lymph node to receive drainage of metastatic cells, to be identified is related to prognosis, adjuvant therapy setting and selecting those patients who actually require the lymphadenectomy.5

The number of women who perform the axillary dissection and reports its result is still high. In a study analyzing the medical records of 454 women who underwent mastectomy, 79.1% reported onset of lymphedema and possibly associated with this condition is pain, burning sensation, muscle strength and breadth of the member committed.6 Perimetry with more than 1 inch of difference between the upper at some point it is possible to be diagnosed with lymphedema.7

Lymphedema can be avoided with adequate preoperative procedures, and though the moments that precede the operation represent fear and apprehension for the patient, it is extremely important that guidelines are passed on their postoperative (PO) as well as the emotional aspects of extirpation of breast this time. Such approaches would avoid postsurgical complications arising from lack of knowledge of the patient.8

We highlight the importance of knowing the patient about their disease, and social support, and multi-family. There is also the indispensable performance of the nurse and the use of teaching-learning.9

The aim of the present study is to analyze the care provided to women affected by breast cancer who had performed axillary dissection.

METHOD

It is an integrative review, where the theme refers to the care provided to women affected by breast cancer and who has performed axillary lymphadenectomy. In order to guide the research, formulated the following question: What care is provided to prevent lymphedema in women who underwent lymphadenectomy? Therefore, this work aimed to organize, in a systematic and orderly manner, the results of the research.

In this type of research the reviewer aims to make a critical selection of texts and evaluate the criteria and methods used by the authors to determine the methodological validity, which causes the reduction of the number of surveys included in the final stage of the review. It aims to achieve this methodology with a deep knowledge about the given topic, defining clearly the presentation of results obtained.10

The development of this integrative review, we used six distinct steps: identifying the topic and research question to conduct the review; establishing criteria for inclusion and exclusion of articles; definition of the necessary information; evaluation of full texts, and interpretation of results and conclusion.10

The survey was conducted during March 2013, which was used as inclusion criteria the articles on your topic brought physical rehabilitation after surgery, as well as guidance and post-surgical passed by healthcare professionals, published in English or Portuguese and ranging from 2000 to 2012. It was considered as an exclusion criterion items not addressed therapeutic processes of rehabilitation after breast surgery.

For select descriptors carried out a consultation with DECS (Descriptors in Health Sciences), resulting in: “lymphedema”, “lymphadenectomy”, “prevention”, “control”, “care” and “mama” in LILACS and “lymphedema “,” prevention “and” control “,” postoperative care “in PubMed.

The search was performed by databases of Latin American and Caribbean Health Sciences (LILACS) and PubMed, totaling 31 publications in LILACS and 7 publications in PubMed. Subsequently, we selected publications that
met the inclusion and exclusion criteria previously defined, resulting in 14:03 for review articles, LILACS and PubMed, respectively.

After selection of items based on the criteria of inclusion and exclusion, began reading the abstracts and full texts of the later aiming to answer the guiding questions.

For data collection, we used an instrument which addresses the following variables: author, title, methodology, year of publication, magazine publication, purpose of the research, prevention and control of lymphedema therapies and adherence to rehabilitation. This analysis was based the development of categories of analysis: (1) prevention and control, (2) treatment and (3) adherence to treatment.

For data evaluation aspects were observed that responded the guiding question, the aspects that affect the quality of life, team performance and type of study. The presentation and discussion of the results is given from the descriptive analysis of these data (Figure 1, 2 and results). All items remained the impartiality of results, discussion and conclusions.

**RESULTS**

The articles are organized in Figure 1 and 2.

<table>
<thead>
<tr>
<th>Author</th>
<th>Title / Journal /Publication year</th>
<th>Objective</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lima TO, Cardoso KQ, Kalif SK, Almeida FB, Fontelles MJ</td>
<td>A fisioterapia no linfedema pós-mastectomia a madden / Rev Para Med / 2004</td>
<td>Assess the importance as a treatment to be used to prevent lymphedema after radical mastectomy.</td>
<td>Cohort study</td>
</tr>
<tr>
<td>Rezende LF, Beletti PO, Franco RL, Moraes SS, Gurgel MS</td>
<td>Exercícios livres versus direcionados nas complicações pós-operatórias de câncer de mama / Rev Assoc Med Bras /2006</td>
<td>To evaluate the association between the type of exercise physiotherapy and incidence of lymphedema after mastectomy.</td>
<td>Clinical trial</td>
</tr>
<tr>
<td>Bergmann A, Pereira TB, Ribeiro ACP, Bourrus N, Silva JG</td>
<td>Prevalência de patologias de ombro no pré-operatorio de câncer de mama: importância para a prevenção de complicações / Fisioter Bras / 2007</td>
<td>To evaluate the prevalence of previous changes to the shoulder in women with indication lymphedema.</td>
<td>Epidemiological study</td>
</tr>
<tr>
<td>Carvalho APF, Azevedo EMM</td>
<td>A fisioterapia aquática no tratamento do linfedema pós-mastectomia / Femina / 2007</td>
<td>Verify the applicability of aquatic therapy in the treatment of lymphedema.</td>
<td>Clinical trial</td>
</tr>
<tr>
<td>Garcia LB, Guirro ECO</td>
<td>Efeitos da estimulação elétrica de alta voltagem no linfedema pós-mastectomia bilateral: estudo de caso / Fisioter Pesqui / 2007</td>
<td>Analyze the effects of high voltage electrical stimulation in post-mastectomy lymphedema bilateral.</td>
<td>Case Study</td>
</tr>
<tr>
<td>Souza VP, Panobianco MS, Almeida AM, Prado MAS, Santos MSM</td>
<td>Fatores predispentores ao linfedema de braço referidos por mulheres mastectomizadas / Rev Enferm UERJ / 2007</td>
<td>Identify the reasons mentioned by the emergence of mastectomy lymphedema.</td>
<td>Exploratory and descriptive study</td>
</tr>
<tr>
<td>Jamall MP, Machado ARM, Rodrigues LR</td>
<td>Fisioterapia na reabilitação de mulheres operadas por câncer de mama / Mundo saúde / 2008</td>
<td>Highlight the effectiveness of physiotherapy after breast surgery.</td>
<td>Literature review</td>
</tr>
<tr>
<td>Oliveira J, César TB</td>
<td>Influência da fisioterapia complexa descongestiva associada à ingestão de triglicerídeos de cadeia média (TCM) no tratamento do linfedema de membro superior / Rev Bras Fisioter / 2008</td>
<td>Check the association between decongestive physiotherapy and diet therapy with TCM intervention on the upper limb lymphedema.</td>
<td>Clinical trial</td>
</tr>
<tr>
<td>Valente FM, Godoy MFG, Godoy JMP</td>
<td>Portadoras de linfedema secundário no tratamento para câncer de mama / Arq Ciência Saúde / 2008</td>
<td>Identify changes in muscle strength in the distal upper limb linfedematoso.</td>
<td>Epidemiological study</td>
</tr>
<tr>
<td>Leal NFBs, Carrara HHA, Vieira KF, Ferreira CHJ</td>
<td>Tratamentos fisioterapêuticos para linfedema pós-câncer de mama: uma revisão de literatura / Rev Latinoam Enferm / 2009</td>
<td>Present physiotherapy modalities to the treatment of lymphedema.</td>
<td>Literature review</td>
</tr>
<tr>
<td>Panobianco MS, Parra AM, Almeida AM, Prado MAS, Magalhães PAP</td>
<td>Estudo da adesão às estratégias de prevenção e controle do linfedema em mastectomizadas / Esc Anna Nery Rev Enferm / 2009</td>
<td>Identify adherence to strategies for prevention and treatment of lymphedema and relate them to the occurrence of edema.</td>
<td>Cross-sectional study of quantitative analysis</td>
</tr>
<tr>
<td>Panobianco MS, Souza VP, Prado MAS, Gozzo TO, Magalhães PAP, Almeida AM</td>
<td>Construção do conhecimento necessário ao desenvolvimento de um manual didático-instrucional na prevenção do linfedema pós-mastectomia / Texto &amp; contexto enferm / 2009</td>
<td>Build knowledge to develop manual for prevention of lymphedema in women with mastectomies.</td>
<td>Qualitative field research</td>
</tr>
<tr>
<td>PARRA MV, Panobianco MS, Prado MAS, Almeida AM, Franco AHJ, Vendrusculo LM</td>
<td>Visita domiciliar a mulheres com câncer de mama: uma estratégia a ser resgatada / Ciência Cuid Saúde / 2010</td>
<td>Report the experience of university extension activities on gynecological cancer and breast to their carriers and family.</td>
<td>Study retrospective</td>
</tr>
<tr>
<td>Nascimento SL, Oliveira RR, Oliveira MMF, Amaral MTP</td>
<td>Visitas domiciliares a mulheres com câncer de mama: estudo retrospectivo / Fisioter Pesqui / 2012</td>
<td>Identify the most common complications and more physical therapy procedures adopted.</td>
<td>Study retrospective</td>
</tr>
</tbody>
</table>

**Figure 1.** Studies selected, LILACS.
Although we have included as publication date since 2000, the selection of articles that showed the scientific theme of this year occurred mainly between 2004 and 2012.

**DISCUSSION**

This study aimed to analyze the care provided to women affected by breast cancer who had performed axillary dissection in order to avoid or minimize the occurrence of lymphedema.

For a better presentation of the discussion, we categorize the main findings in the literature: prevention and control, and treatment adherence rehabilitation.

**Prevention and control:**

The prevention of lymphedema begins preoperatively through guidance of health professionals in relation to body posture that we should adopt the postoperative (PO) and the importance of continuing treatment with rehabilitation.\(^{10, 11}\) At this point it is important to evaluate the presence of any joint alteration, for example arthritis,\(^{12}\) that influence the development of their recovery.

The preventive treatment after surgery, the absence of a guideline, guidelines that would define what are the appropriate physical therapy to women who underwent surgical treatment of breast cancer, helps to make the protocol adopted, different in each institution, subject to mistakes and successes as well as demonstrated in a study in a rehabilitation center where exercises of flexion, extension, abduction, adduction, internal and external rotation monitored not represented significant prevention of lymphedema, although women have been advised not to confine themselves in household chores.\(^{13}\)

Home visits were identified as important action for the recognition of the patient, their family and their social status in order to reintroduce it to the service, as well as their adherence to treatment and self-care.\(^{6}\) This practice allows such aspects to not be lost because it sporadically can be forgotten in the clinic visit.\(^{14}\)

The condition of overweight and obesity presented as a predisposing factor the lymphedema, hence the weight loss was important in preventing or less comorbidit frame,\(^{15, 16}\) to consider that the lymphatic return is hampered in patients with large amounts of adipose tissue.\(^{17}\) Underscoring, thus the importance of proper nutrition.\(^{18}\)

In order to promote the prevention and control of lymphedema through awareness and self-care, vision health professionals, it should be clear to the patient the functioning of the lymphatic system and lymphedema, how to identify such occurrence, risk factors, which are optional therapies and consequences and explain why each guideline language is congruent with the population.\(^{13}\) The following specified risk factors are important to be mentioned: take shot on the arm, to take care cuticle, hypertension, physical inactivity, poor skin hydration, not sunscreen use, perform self massage without quality, banding and sleeve use without professional guidance as and catch weight.\(^{16, 18, 20}\)

The distribution of manuals and booklets with instructions for prevention of lymphedema has been adopted by institutions for rehabilitation of women with mastectomies.\(^{13, 19}\) The adoption of this intervention to raise awareness of a population provides significant results.\(^{22}\)

**Therapies**

During the postoperative period from day 0 to day 15, the ipsilateral shoulder joint mobility (flexion, abduction and external rotation of the shoulder) surgery should be limited, simple, dynamic, self-massage to stimulate the lymphatic drainage, the latter indicating from the first postoperative day. After the 15th postoperative day, the range of motion should not be restricted and should be taken in the shortest possible time. The referral to physiotherapy sessions is important in the rehabilitation of the shoulder girdle and the reordering from limb with the rest of the body,\(^{10, 19}\) reflecting the improved ability of

---

**Table: Studies selected, Pubmed.**

<table>
<thead>
<tr>
<th>Author</th>
<th>Title / Journal / Publication year</th>
<th>Objective</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacovara JE, Yoder LH</td>
<td>Secondary lymphedema the cancer patient / Medsurg Nurs / 2006</td>
<td>Talk about lymphedema, its diagnosis, treatment and prevention.</td>
<td>Literature review</td>
</tr>
<tr>
<td>Sanchez AMC, Lorenzo CM, Peñarrocha MGA, Ferrándiz AME, Céspedes AI, Ojeda AJ</td>
<td>Preventing lymphoedema after breast cancer surgery by elastic restraint orthotic and manual lymphatic drainage: randomized clinical trial / Med Clin (Barc) / 2011</td>
<td>Analyze the effectiveness of containment elastic orthosis and manual drainage in preventing lymphedema secondary to mastectomy.</td>
<td>Randomized clinical trial</td>
</tr>
</tbody>
</table>

---

**Figure 2.** Studies selected, Pubmed.
Care to mastectomy with axillary lymphadenectomy... forgetfulness. Adherence to practice prevention and minimization of lymphedema, a condition that brings weakness, lack of self-esteem and embarrassment to women, starts when it is known its mechanism and how the treatment acts in this process.

Women with lymphedema reported their emergence installed due to overexertion, the actual surgery, radiation, excessive heat, lack of guidance on the prevention and problems with the drain. While acknowledging some predisposing factors to lymphedema, it still shows up outdated knowledge about the risks to which they are vulnerable, and this is the cause of their exposure.

The perception of the patient’s lack of sensitivity and empathy improper and conflicting guidelines and represent factors that alienate the patient's rehabilitation treatment.

CONCLUSION

Non-adherence of the patient to the proposed treatment is due to lack of awareness of the severity and consequences of the installation of lymphedema. Reinforced, thus, the importance of passing on information to patients about the pathophysiology of this condition, and should be guided in their daily activities.

REFERENCES


English/Portuguese

J Nurs UFPE on line., Recife, 8(4):1064-71, Apr., 2014

1068


Care to mastectomy with axillary lymphadenectomy...
Care to mastectomy with axillary lymphadenectomy...