

PERFORMANCE OF PHYSIOTHERAPY IN COMPLICATIONS PRESENTED AFTER GYNECOLOGICAL CANCERS

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Abstract: Introduction Physiotherapy works in the complications resulting from the treatment of gynecological cancers, in the rehabilitation of dysfunctions, using various resources. Objectives To analyze the role of physical therapy in the complications presented after gynecological cancers; to carry out a bibliographic survey on the complications presented after the treatments of gynecological cancers and to identify the contraindications of the physiotherapeutic resources applied to the treatment of complications. Methodology An integrative bibliographic review, carried out through articles that explore the topic addressed. Data collection took place between June and August 2021. The search bases used were: LILACS, PUBMED, GOOGLE ACADEMICO and SCIELO, with a time restriction between 2015 and 2021. The searches were carried out in Portuguese and English. The sample consisted of seven studies that met the inclusion criteria. Results Among the complications resulting from gynecological cancers, vaginal stenosis was cited by 71.4% of the included studies, dyspareunia was cited by 42.8%, decreased PFM strength by 28.5%, vaginal dryness, lymphedema of the limbs lower limbs and overactive bladder syndrome by 14.2% each. Using physiotherapeutic resources such as vaginal dilation, perineal massage, pelvic floor muscle training, electrostimulation, complex decongestive therapy and guidelines, the physiotherapeutic treatments used improved the clinical condition of the participants in 57.2% of the included studies. Conclusion Physiotherapy can treat gynecological complications by improving muscle, sexual and voiding function and improving these women's quality of life.

Keywords: Physiotherapy. Gynecological cancer. dysfunctions.

INTRODUCTION

Cancer is not a singular diagnosis, it is a generic term that encompasses several types of malignant diseases that share the disordered growth of cells, which can invade organs and tissues (INCA, 2020). Among the neoplasms we found gynecological cancer being one of the most common among the female population (VAZ et al, 2011). Gynecological cancer covers malignant neoplasms of the cervix with 16,710 new cases, representing 29.7% of all cancer cases in Brazil; followed by ovarian cancer with 6,650 new cases (6.18%), uterine body cancer with 6,540 new cases (6.07%), vulva cancer with 1,748 new cases (1.6%) and finally vagina cancer with 543 new cases (0.51%) (PIKULA et al, 2021).

According to Jemal et al (2011), in Latin America, the incidence of cervical cancer is considered one of the highest in the world, corresponding to 25% of all types of cancer in women. The cause of cervical cancer is multifactorial, being related to age at onset of sexual activity, number of sexual partners, smoking, nutritional deficiencies, number of pregnancies and children, immunosuppression, HIV infection and human papillomavirus (HPV) infection (ALVES et al, 2001).

Ovarian cancer represents the seventh most incident cancer and the eighth leading cause of cancer death in women worldwide (MEIRA, 2019). According to the World Ovarian Cancer Coalition (2020), the number of women diagnosed with this type of cancer is expected to increase to almost 40% by 2040. Symptoms of ovarian cancer are non-specific, and include feelings of fullness, dyspepsia, swelling, abdominal pain, or distention, which can mimic other conditions, such as irritable bowel syndrome, and thus lead the patient to a late diagnosis (CONITEC, 2019).

Endometrial cancer is considered the most prevalent malignancy in industrialized countries. In Brazil, it occupies the seventh position among all malignant tumors that affect women, being the second most frequent gynecological tumor (CARVALHO, 2019). The vast majority of endometrial carcinomas are located in the fundic region of the uterus, for this reason, it has often been called uterine body cancer, having in common some factor that increases exposure to estrogenic hormones, whether endogenous or exogenous. Endometrial cancer has as risk factors: hyperestrogenism, precocious puberty, late menopause, white race, obesity, nulliparity, diabetes mellitus, arterial hypertension, personal history of irradiation in the pelvis, diseases of the gallbladder and cancer of the ovary, breast and colon (CARVALHO; SOUEN, 2001).

According to Carvalho and Souen (2001), vulvar cancer represents 1 to 5% of gynecological malignancies, despite being an external and visible lesion, it is usually diagnosed late due to the low cultural and economic level of women, as well as difficulties in accessing health services, and the lack of appreciation of early signs and symptoms by health professionals, which leads to a delay in diagnosis and treatment. The main risk factors for this carcinoma are: early onset of sexual intercourse, multiple partners, low socioeconomic status, smoking and previous HPV infection. Vaginal cancer is rare, constituting only 1%–2% of all women with genital tract malignancies and only 10% of all vaginal malignancies.

It is defined as a cancer found in the vagina without clinical or histological evidence of cervical or vulvar cancer, or a previous history of such cancers within five years. Historically, these cancers are more common in older and postmenopausal women.

The choice of treatment depends mainly on the histological type of the tumor, the staging of the disease, the patient's age and clinical conditions. Possible forms of treatment may include: surgery, chemotherapy, radiotherapy, hormone therapy and targeted therapy, with treatment often being a combination of these. These treatments are aggressive and can lead to possible pelvic floor dysfunctions, such as pelvic pain, early menopause, urinary dysfunction, vaginal stenosis, anorectal dysfunction, and sexual dysfunction.

It is observed that these dysfunctions have become a cause of embarrassment for these women when they disclose their symptoms to family, friends or even health professionals, threatening their body image, triggering low self-esteem, loss of femininity and compromised sexuality (BIRTH, 2019).

Considering that there is a need to expand investigations on the importance of physical therapy in the dysfunctions presented after gynecological cancer, the present study has the general objective: to analyze the role of physical therapy in the complications presented after gynecological cancers; and as specific objectives: to carry out a bibliographic survey on the complications presented after the treatments of gynecological cancers and to identify the contraindications of the physiotherapeutic resources applied to the treatment of complications.

METHODOLOGY

This is an integrative literature review. This type of review aims to synthesize the results acquired in research on a topic or issue, in a systematic, orderly and comprehensive manner. It is called integrative because it offers broader information about a subject/problem, thus constituting a body of knowledge. This way, the reviewer/researcher can prepare an integrative review with different purposes, which can be directed to

the definition of concepts, review of theories or methodological analysis of the studies included on a particular topic (ERCOLE et al., 2014).

For the preparation of the bibliographic review, articles obtained from the following electronic databases were used: LILACS, PUBMED, Google Scholar, SCIELO and health portals such as the Ministry of Health and the National Cancer Institute (INCA) and content available in virtual environments.

The study population consisted of articles related to the study topic found in the following databases: LILACS, PUBMED, Google Scholar and SCIELO. The sample consisted of seven studies found in the search strategy that matched the inclusion criteria. As inclusion criteria in the study, articles dealing with post-treatment complications of gynecological cancers, freely available and in Portuguese and English, published between 2015 and 2021, were excluded. unavailable, with different objectives from those studied and bibliographic reviews.

A bibliographic survey of scientific articles was carried out between June and August 2021, using the following descriptors indexed in Portuguese and English: "gynecological cancers", "dysfunctions", "physiotherapy" (physiotherapy)), using the Boolean operator "AND" to cross databases between the three descriptors. 98 primary studies were identified in the respective electronic databases, being LILACS (n=20), PUBMED (n=24), GOOGLE ACADEMIC (n=16) and SCIELO (n=38).

Studies were selected by reading the titles and respective abstracts with search results. Subsequently, the articles that remained were evaluated in full, with the reading of the full text, for a complete analysis of the material collected, those that fit the proposed theme were selected. Subsequently, a new analysis was carried out where they were selected

based on the inclusion criteria, followed by a critical analysis of their methodological procedures and results, as can be seen in figure 1.

The data obtained from the bibliographic survey were analyzed taking into account the following information: author, year of publication, objective of the study, type of study and the authenticity of the study. The results obtained were presented in tables, highlighting their main characteristics, such as: author(s) and year of publication, title, objective, population and sample, sample size calculation, evaluated groups, intervention, treatment protocol and results.

RESULTS AND DISCUSSION

After bibliographic analysis, 91 articles were excluded due to: articles repeated between the databases, articles with objectives different from those studied, published before 2015 and bibliographic reviews, being included in the sample seven articles, which were cataloged in a table, which will present the information that deserves to be highlighted about the scientific articles used in this review. The articles were arranged in order according to the year of publication.

Among the studies that were included in the review, 1 was published in English and six in Portuguese, including a retrospective study, a clinical trial, two cross-sectional studies, a

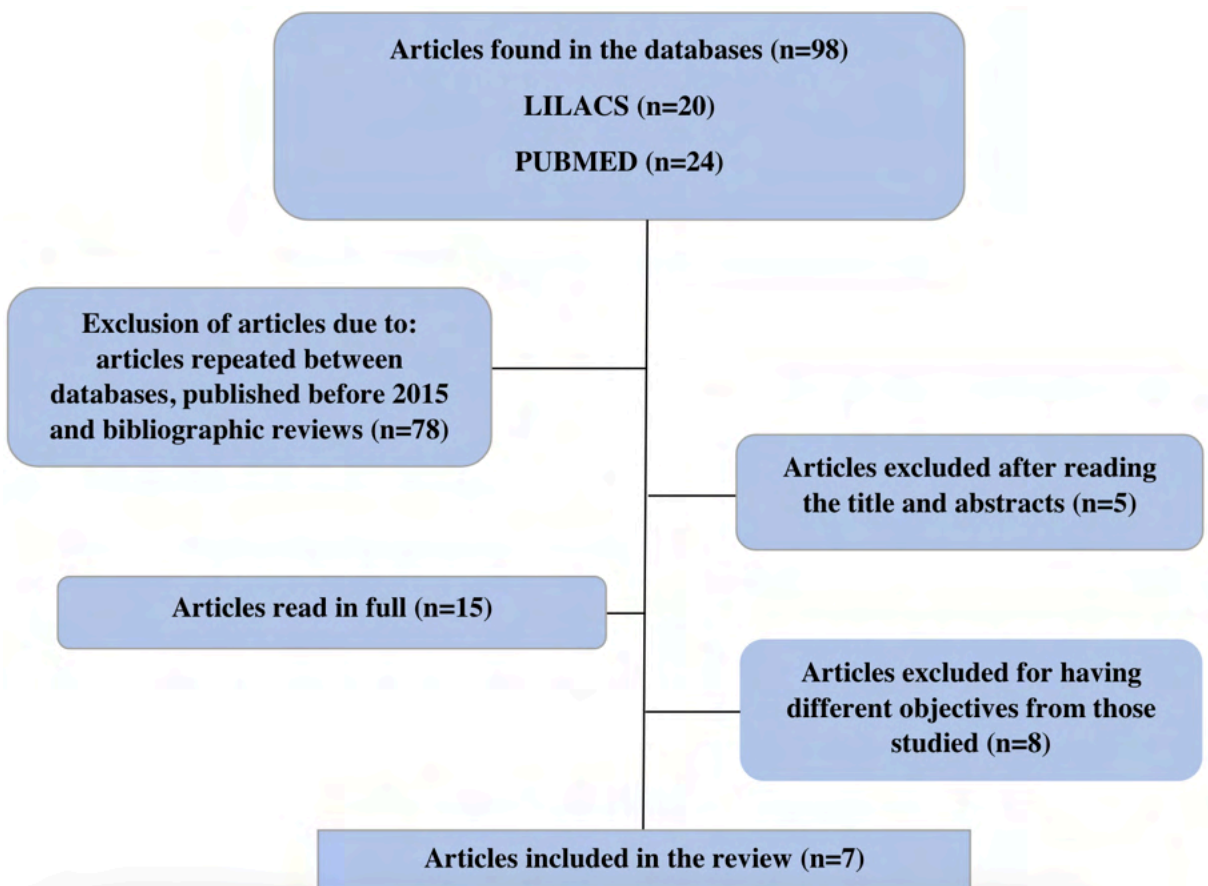


Figura 1 – Flowchart of search and selection of articles.

Source: Survey Data (2021).

blinded controlled clinical trial, and two case reports.

Table 1 shows the main information about the studies that made up this review.

The treatments available for gynecological cancer can cause damage to the woman's urogynecological system, such as: genital pain, decreased elasticity of the vaginal canal, decreased vaginal secretion and atrophy of the mucous lining of the vagina. When brachytherapy is performed, vaginal involvement can cause the appearance of vaginal stenosis, as seen in the study by Nascimento et al (2021), Nascimento (2019), Pereira et al (2020), Menezes et al (2017) and Oliveira et al. (2015).

In the study by Pikula et al (2021), carried out with 23 women undergoing brachytherapy and with the objective of identifying the occurrence of post-gynecological brachytherapy vaginal stenosis and its repercussions from the perspective of women, it was observed that these women presented worsening of signs and symptoms. such as the emergence of high degrees of vaginal stenosis, directly affecting the social life of these women, since a conflict arises between maintaining the marital relationship and accepting the limitations caused by the treatment of the disease.

The study by Oliveira et al (2015) shows that physical therapy uses important techniques for the treatment of vaginal stenosis, such as training the pelvic floor muscles (TMAP), vaginal dilators, guidelines for sexual intercourse and perineal massage. These physiotherapeutic techniques showed positive results when performed in combination. After the ninth session of physical therapy, the patient was able to satisfactorily return to her sex life. In the study by Nascimento et al (2021), the importance of patient adherence to physical therapy guidelines in the prevention of vaginal

stenosis was observed, since, according to the authors, there was a good adherence by women to follow some type of prevention orientation of stenosis and maintenance of the practice of these guidelines over a year. In addition, they report that physical therapy guidelines were effective in preventing vaginal stenosis, as there was no increase in prevalence over this period.

According to data found in the study by Menezes et al (2017), after undergoing cervical cancer treatments, women presented dysfunctions such as: vaginal stenosis, dyspareunia and loss of strength of the pelvic floor muscles. As for Pereira et al (2020), in addition to these changes, women can also present: vaginal dryness, orgasmic dysfunction, urinary and fecal incontinence, presence of fistulas and coitorrhagia.

Also called disorders or disorders, female sexual dysfunction is defined as the subject's persistent and recurrent difficulty in performing one or more phases of the sexual physical response (BARACHO, 2014). According to Trindade and Luzes (2017) physiotherapy is an effective resource in the treatment of female sexual dysfunction, having as the responsibility the restoration and functionality of the pelvic floor muscles, bringing pain relief, preventing or rehabilitating the limitations of physical disabilities imposed by the disease.

Among the female sexual dysfunctions that arise after treatments for gynecological cancers, dyspareunia is the most common and most cited in studies by Menezes et al (2017), Nascimento (2019) and Pereira et al (2020). For Aquino (2019) dyspareunia is a painful sexual dysfunction, which deprives women of all pleasure during sexual practice, causing various emotional, social and psychological changes, and which can seriously affect sexuality. The physiotherapeutic resources used to treat this dysfunction have been shown

Author/Year	Title	Type of Study/ Sample	Study Purpose	Procedure / Assessment	Results Found
NASCIMENTO et al, 2021	Adherence to physiotherapeutic guidelines in the prevention of vaginal stenosis after brachytherapy in the treatment of cervical cancer.	This is a retrospective study of the medical records of women with cervical cancer undergoing brachytherapy, consisting of 60 medical records of women.	Evaluate patients' adherence to physical therapy guidelines in the prevention of vaginal stenosis	Were information was collected through a data collection form prepared including sociodemographic variables, evaluation clinical and physical therapy and the practice of physical therapy guidelines for the prevention of vaginal stenosis, which consisted of perform vaginal dilation exercises and/or sexual intercourse for women who have partners.	In the first evaluation after 45 days of brachytherapy, it was possible to observe that 21 women (35%) performed vaginal dilation exercises, 26 women (43.3%) were sexually active and 13 women (21.7%) had vaginal stenosis. After one year, 21 women (35%) performed vaginal dilation exercises and 26 women (43.3%) were sexually active. Considering those who performed at least one of the orientations, it is noted the adherence of 43 women (73.3%).
BARBOSA, 2021	Secondary lymphedema of lower limbs: A case report	This is a case report composed of 1 patient with grade III lower limb lymphedema acquired after undergoing treatment for cervical cancer.	The study aims to attract the reader's attention through the case report of a patient with secondary lymphedema of the lower limbs, in addition to highlighting the main manifestations and relevant forms of diagnosis and treatment of this disease.	Interview with the patient, in which the information regarding the pathological history was described in chronological order of events.	After undergoing radiotherapy sessions, the patient observed that her lower limbs were swollen and the swelling had not improved after rest. She was diagnosed with grade III secondary lymphedema of the lower limbs (Mowlen classification). Drug treatment associated with therapy was performed complex decongestant, but without positive results with the therapy. one occurred worsening of lymphedema, worsening mobility of the lower limbs and ambulation, favoring sedentary lifestyle and obesity.
DUARTE et al, 2021	Effect of physical therapy on symptoms of overactive bladder syndrome resulting from cervical cancer treatment.	This is an uncontrolled clinical trial. The sample consisted of 10 women who underwent treatment for cervical cancer.	To verify the effects of physical therapy on the symptoms of overactive bladder syndrome in women undergoing treatment for cervical cancer.	An evaluation form was used to verify the patients' gynecological, obstetric and lifestyle data. Overactive bladder syndrome symptoms were assessed using the Incontinence Questionnaire Overactive Bladder (ICIQ – OAB). For the physical therapy intervention, the PA muscle training protocol (TMAP), Transcutaneous Tibial Nerve Electrostimulation and Behavioral Therapy were used.	There was a statistically significant decrease in the median of symptoms of overactive bladder syndrome. According to the ICIQ – OAB questionnaire, the median voiding frequency was 0 and remained 0 after the physical therapy protocol; Nocturia in turn went from 2.5 to 0-1 after the protocol; voiding urgency went from 2 to 0-0. As well as the IUU, which also had a median of 2 and changed to 0-0 after the protocol. The total score before the protocol was 7 and changed to 1, which proves this decrease in the median. In the impact of quality of life, there was also a statistically significant decrease, before the application of the protocol, the total score of the ICIQ – OAB questionnaire regarding QOL was 20 before the application of the protocol and changed to 0-4.75 after the protocol, indicating an improvement in the picture.

<p>PEREIRA et al, 2020</p>	<p>Physiotherapy in gynecological complications resulting from the treatment of cervical cancer.</p>	<p>This is a blinded controlled clinical trial, carried out with 16 women.</p>	<p>To verify the effect of physical therapy on gynecological complications and quality of life (QV) of women after treatment for cervical cancer.</p>	<p>The assessment of PFM function was performed using the Functional Kinesiological Assessment of the Pelvic Floor Musculature (AVCF-MAP) form and the modified Oxford scale. The evaluation of gynecological complications occurred through the verification of possible anatomical alterations at the time of the physical examination. Regarding the verification of vaginal stenosis, the Common Terminology Criteria for Adverse Events (CTCAE) scale was applied. At the end of the evaluation, the participants answered a QOL questionnaire, The World Health Organization Quality of Life (WHOQOL-BREF).</p> <p>The intervention consisted of perineal massage and pelvic floor muscle training for six weeks.</p> <p>To obtain the results, the participants were divided into two groups, 6 participants from the GDE (exclusive home group) and 10 from the GAM (mixed outpatient group).</p>	<p>It was observed that after the physical therapy protocol, the GAM showed a statistically significant improvement for stenosis, dryness, vaginal shortening, vaginal narrowing and decreased libido, when compared to the GDE group.</p> <p>The analysis of the QOL of the participants, it was noticed that the average of the total score did not present great discrepancy between the groups, before and after the intervention, since the mean total GAM score was 13.63 ± 2.66 before the protocol and changed to 14.06 ± 2.12 after the protocol ($p=0.58$). The GDE group had a total score of 13.10 ± 1.72 and increased to 14.00 ± 2.03, however, showing a significant improvement ($p=0.05$) after intervention.</p>
<p>NASCIMENTO, 2019</p>	<p>Comparison of pelvic floor dysfunction with sexual function and quality of life in gynecologic cancer survivors.</p>	<p>This is a cross-sectional study, with 64 participating women.</p>	<p>To compare pelvic floor contraction, vaginal stenosis and dyspareunia with sexual function and health-related quality of life in gynecologic cancer survivors.</p>	<p>An identification form containing sociodemographic data, gynecological and obstetric history, history of the disease, treatments performed and life habits was used. Sexual function was assessed using the Sexual Quotient - Female (QS-F) questionnaire. Quality of life was assessed using the Functional Assessment of Cancer Therapy - General (FACT-G) questionnaire. Pelvic floor muscle function was assessed by measuring the degree of muscle contraction performed by the same examiner in all participants through bi-digital touch, and classified into different functional degrees, using the Pelvic Floor Functional Assessment (AFA).</p>	<p>Dyspareunia was observed in 32.8% of sexually active women, vaginal stenosis was identified in 45.3% of cases, and 45.3% had absent pelvic floor contraction. There was an association between vaginal stenosis and dyspareunia, but sexual activity and pelvic floor contraction were not associated with vaginal stenosis. In addition, vaginal stenosis, dyspareunia and pelvic floor contraction were not significantly associated with quality of life.</p>
<p>MENEZES et al, 2017</p>	<p>Physiotherapeutic evaluation in pelvic floor disorders consequent to cervical cancer treatment</p>	<p>This is a cross-sectional study with 12 women participating</p>	<p>To assess pelvic floor dysfunction resulting from cervical cancer treatment</p>	<p>As evaluation instruments, an evaluation form was used, containing the patient's identification, gynecological history, type of surgery performed and history of the disease.</p> <p>The presence of dyspareunia was evaluated through a questionnaire containing 4 questions about the intensity of pain during sexual intercourse, which were answered objectively, in addition to the Visual Analogue Scale. For the evaluation of voiding dysfunction, an assessment of voiding dysfunction was performed, in addition to the Pad Test, if necessary.</p> <p>The functional assessment of the pelvic floor (AFA) was measured by bidigital palpation.</p>	<p>When verifying dyspareunia, it was observed that 75% of the patients reported pain during sexual intercourse. With regard to the strength of the floor muscles, it was found that 41.7% of the women had AFA, 2.25% had AFA 1 and 33.3% had AFA 3. It was observed that the 12 participants had vaginal stenosis, with length minimum of 5.50 cm and maximum of 8 cm, with a median of 6.6, mean of 6.63 ± 0.72.</p>

OLIVEIRA et al, 2015	Physiotherapy rehabilitation used to treat vaginal stenosis after pelvic radiotherapy.	This is a case report of a woman with post-brachytherapy vaginal stenosis due to endometrial carcinoma.	To describe a physical therapy rehabilitation strategy used to treat vaginal stenosis after pelvic radiotherapy for gynecologic cancer	A physical examination was performed to assess vaginal stenosis and pelvic floor (AP) muscle function. The PERFECT scale was used to check the woman's ability to perform the contraction of the AP. For physiotherapeutic rehabilitation, the following techniques were performed in nine sessions: perineal massage, TMAP, vaginal dilators and guidelines for sexual intercourse.	Treatment outcomes for this case included patient satisfaction during intercourse and gynecological examination. in the first After five sessions, the patient reported improvement in the elasticity of the vagina, although she was still not able to attempt penetrative intercourse. In session seven penetrations were possible, but she still felt pain. Pain-free intercourse was achieved after session eight. After nine sessions, the patient had grade 1 vaginal stenosis (according to the scale used).
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Table 1. Main information contained in the selected studies.

Source: Survey Data (2021).

to be quite effective. The use of transcutaneous electrical nerve stimulation (TENS) can be used to allow pain inhibition, while functional electrical stimulation (FES) acts to strengthen the muscles through passive contractions, providing the contraction of MAP and increasing blood flow to the site. Vaginal biofeedback devices can also be used and help to strengthen and raise awareness of the perineal muscles, all with the aim of reducing the pain caused during sexual intercourse.

According to Duarte et al (2020), extensive pelvic surgeries and radiotherapy damage the functionality of the pelvic floor, impairing pelvic vascularization and PFM innervation, giving rise to a series of dysfunctions in addition to interfering with the quality of women's sexual life. It is noticed that in victims of gynecological cancer, in the initial phases after radiotherapy treatment, there is a decrease in the strength and amplitude of muscle contraction of the muscles. MAP. For Jhingran et al (2013), the decrease in strength or fatigue is usually caused by radiotherapy, affecting the superficial muscles of the MAP. For this, physiotherapy makes use of various methods aimed at strengthening this muscle

group, improving its function and favoring a conscious and effective contraction, bringing benefits related to the elements of support and improving muscle resistance (ANDREAZZA; SERRA, 2019).

For Vital (2021) physical therapy in female urinary incontinence after treatment for gynecological cancer aims to gain proprioception and strengthen MAP. This treatment can be performed through intravaginal massage techniques, release of trigger points, TMAP, biofeedbacks and electrotherapy for patients who have decreased strength of the MAP, promoting the gain of proprioception and strengthening of the MAP and inhibiting the action of the detrusor muscle. This loss of muscle strength can be observed in the participants of the studies by Menezes et al (2017) and Nascimento (2019).

Physiotherapy also appears in the study by Barroso et al (2018), as being considered one of the procedures of choice in the treatment of fecal incontinence, which takes place through the reeducation of patients. MAP, specific exercises, electrostimulation and biofeedback improving the lumbopelvic static imbalance, the sensitivity of the rectal ampulla, helping in

muscle proprioception and perineal sphincter and providing an improvement in the quality of life.

Kirchheiner et al (2014) noticed that vaginal dryness and vaginal bleeding are symptoms frequently cited among women undergoing brachytherapy, and the latter tends to decrease during treatment. These morbidities, considered as side effects of the treatment against gynecological cancers, bring enormous consequences causing a great impact on the quality of life of these women. In these cases, physiotherapy works by relaxing and stretching the pelvic muscles, through electroanalgesia and manual therapy, in addition to the use of biofeedback (DELGADO et al, 2014).

In addition to all these complications caused by the treatments available for gynecological cancers, the presence of overactive bladder syndrome was seen in the study by Duarte et al (2021), carried out with 10 women undergoing treatment for cervical cancer. Overactive bladder can occur in these women due to vascular and neural changes caused by pelvic radiotherapy, which leads to tissue hypoxia, fibrosis and decreased bladder capacity, giving rise to urinary dysfunction. This study demonstrated that the physiotherapeutic treatment performed through a protocol using the training of the pelvic floor muscles (TMAP), associated with perineal massage, transcutaneous electrical stimulation of the tibial nerve and behavioral therapy resulted in the improvement of symptoms related to overactive bladder syndrome, as well as in the reduction of their impact on the quality of life of women.

Another common complication in women undergoing treatments for gynecological cancers is lymphedema, as observed in the study by Barbosa (2021). Corroborating this study, the research carried out by Catalán (2018) observed that women undergoing

retroperitoneal lymphadenectomy due to gynecological cancer have secondary lymphedema in the lower limbs. (MMII).

It is known that lymphedema is a chronic and potentially disabling disease, caused by an alteration in lymphatic transport, generating lymphatic insufficiency due to anatomical eradication, that is, after a lymphadenectomy, one of its consequences is the accumulation of interstitial fluid, which contains a high content of molecular proteins generating an increase in the volume of the member. Some symptoms associated with edema are noticed, such as: decreased range of motion, infections and problems with body image. The lower limbs are directly linked to independence and functionality, so lymphedema can influence aspects such as mobility, functionality, activities of daily living and professional activities (HOPP et al, 2016; CATALÁN, 2018).

The study by Catalán (2018) consisted of 36 women divided into two groups, a control group and an experimental group, in which a physiotherapy program was applied to reverse the lymphedema and show the effectiveness of adding the application of Kinesiotaping. In the experimental group, skin care treatment, manual lymphatic drainage (MLD), compression bandage, Kinesiotaping and lymphomyokinetic exercises. The other group received the same treatment, but without Kinesiotaping. The research provided greater scientific knowledge about the effectiveness of Kinesiotaping in patients suffering from lymphedema of the MMII post-lymphadenectomy, but it was not possible to prove its potential to reduce the volume, increase the ROM of flexion and extension of the ankle or to improve the quality of life of the patients, since the final measures were not presented.

Pereira et al (2020) in their study with a sample of 16 women, performed a

physiotherapy program applied to women who had undergone pelvic radiotherapy, brachytherapy, chemotherapy and who had been discharged from treatment, with the aim of verifying the effect of physiotherapy in gynecological complications and quality of life (QoL) of women after cervical cancer treatment. Participants were divided into two groups, the mixed outpatient group (GAM) and exclusive household group (GDE). Both groups underwent the same physiotherapeutic protocol for six weeks, containing diaphragmatic awareness, perineal self-massage, performing PMT and using dilators for the GAM and plastic tubes for the DEG. The GAM performed the protocol once a week at the clinic and twice a week at home, and the GDE, three times a week only at home, during the six weeks.

At the end of the physical therapy treatment, there was a statistically significant improvement in muscle function (endurance $p=0.0001$, power $p=0.02$ and strength $p=0.002$) in the GAM and (endurance $p=0.04$) in the GDE. In the analysis of QoL, it was observed that the mean total score did not show great difference between the groups, before and after the intervention. However, the authors concluded that physical therapy was able to treat the gynecological complications of women after cervical cancer treatment, but the treatment when performed in an outpatient setting was more effective when compared to home treatment alone.

In a study carried out by Toriy et al (2015) it was observed that the proposed treatment to combat gynecological cancer, in addition to causing voiding, sexual and proctological dysfunctions, has physical-emotional repercussions as a consequence of the experience. Symptoms such as diarrhea and constipation were evidenced, bringing a negative impact on QOL after radiotherapy treatment, significantly contributing to

the increase in the risk of a drop in QOL. In the emotional context, responses were evidenced, such as: stress, apathy, depression, discouragement, emotional hypersensitivity, anger, anxiety and irritability.

In all the research carried out for the construction of the present research, no contraindication of the physiotherapeutic resources applied to the treatment of complications was evidenced.

The diagnosis and treatment of gynecological cancer can generate a phase of denial in the woman, which is followed by stagnation of reality or a change in attitude towards life in an attempt to hide the discomforts of the disease, leading this woman to give up. For this reason, Toriy et al (2015) emphasize the importance of having a deeper understanding of the theme, because in addition to strategies for care focused on symptom management, preparation, education and support for patients can be an alternative to improve quality of life.

FINAL CONSIDERATIONS

The treatments used to fight gynecological cancer can generate PAD. These dysfunctions cause physical and psychological damage to women's lives, bringing embarrassment in the social and personal environment. In this review, it was possible to observe a variety of dysfunctions and complications resulting from these treatments, namely: vaginal stenosis, dyspareunia, decreased strength of the MAP, vaginal dryness and decreased lubrication, lower limb lymphedema, vaginal bleeding, muscle fatigue, vulvar hypersensitivity and overactive bladder syndrome, among others.

Physiotherapy makes use of various techniques and resources that can reduce and improve these symptoms and dysfunctions through PMT, perineal massage, electrostimulation, behavioral

therapy/guidance, complex decongestive therapy, among others. Through the studies included in the current review, it was also found that physiotherapy was able to treat gynecological complications by improving muscle, sexual and voiding function in women after treatment for gynecological cancer. No contraindication of the physiotherapeutic resources applied to the

treatment of complications was evidenced and only in a case study type, a better condition of the patient was not observed with a physiotherapeutic technique.

However, there are few studies that address the role of physical therapy in the complications presented after treatment of gynecological cancers, and more research is needed on the subject.

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