Medical and Complementary Therapy in Women with Cervical Cancer

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Abstract

Objective: To know the complementary therapy in patients with cervical cancer and to evaluate the reported effects according to scientific evidence.

Methods: Systematic review of the literature in scientific journals with the level of evidence II-IV in the PubMed portal, about the use of complementary therapy in cancer patients. Duplicates were excluded, if they included full-text articles, made in humans, with less than five years old related to cervical cancer and alternative therapy.

Result: The use of complementary therapy in cancer patients was found in 10 articles with a frequency of use of 16.4% to 87%, the most used was biological therapy, followed by body practices. It was better reported in 78% and decreased the effects of the use of conventional therapy for 75% of people.

Conclusion: Complementary therapy is used to improve the quality of life of patients with cervical cancer. Complementary therapy of biological type is the most used. The use of this treatment is related to the idea of having an improvement in personal well-being. More studies are needed to complement the benefit of the use of this therapy on cancer.

Keywords: Alternative therapy; Complementary therapy; Cancer; Cervical cancer

Introduction

Cervical cancer (CaCu) is considered a global public health problem, the detection of CaCu in early stages is highly curable, has a recurrence rate of 8 to 25% and even parity can be preserved in young patients with carcinoma of the stage 0 to IA2 [1-4].

The World Health Organization (WHO) of 2012 reports that Mexico is in the second place of incidence in women with a total of 13,960 (17%), represents the second cause of death in women with a total 4,769 (12%) with a prevalence in women of 11,168 (20%). In five years, the prevalence will increase to 47,000 (21%). The entities with the highest mortality from cervical cancer in Mexico Colima (17.7%), Chiapas (17.6) Guerrero (15.6%), Veracruz (15.4%) and Oaxaca (15.2%) [1-3]. CaCu when not detected and treated in the early stages, expands from the cervix to the lower segment of the myometrium, paracervical nodes, lymph nodes and structures adjacent to the parametrium [5]. The early invasive stages reach 39% or in young patients in which good hormonal functioning and the possibility of conservation of reproductive capacity must be maintained [4].

CaCu is associated with a state of immunosuppression and increased malignancy, especially in women with AIDS, with organ transplantation, end-stage chronic kidney disease, an autoimmune disease in immunosuppression or smoking history. Immunotherapy can have greater progress in these cases and includes adoptive cell therapy, therapeutic vaccines and monoclonal antibodies against inhibitors [6].

Cabinet studies are used to plan treatment based on the International Federation of Gynecology and Obstetrics (FIGO), who accepts the use of computed tomography, magnetic resonance imaging, and positron emission tomography [7]. The latest guidelines indicate that all patients with histopathologically documented risk factors (E3, L1 or V1 or B) management
began with surgery followed by adjuvant chemotherapy and radiotherapy however they currently recommend that the treatment is with chemotherapy and radiotherapy avoiding surgical management [5].

The treatment is based on the stage, size and shape of the tumor, age, clinic and desire to have children of the woman. Depending on this, it will be the management that will be given and will be classified in initial stages (I to IIA) or advanced (from IIB, with invasion to parametria) with a low intermediate or high risk for recurrence [4]. WHO defines traditional medicine as the total sum of knowledge, skills, and practices based on indigenous theories, beliefs and experiences of different cultures whether explained or not used for health maintenance and prevention, diagnosis, improvement and Treatment of physical and mental diseases [8]?

The terms of complementary, alternative, integrative and unconventional medicine are interchangeable with traditional medicine in some countries. However, according to the last modification made in June 2016 of the NCCIH (National Center for Complementary and Integrative Health), it indicates that they have different meanings. Complementary medicine is unconventional medicine used in conjunction with conventional medicine, alternative medicine is unconventional medicine used instead of conventional medicine and integrative medicine is used to refer to the use of complementary and alternative medicine jointly and in a way coordinated [9].

The NCCIH is the leading Federal Government agency for scientific research in the alternative and complementary medicine approach. It classifies it into two large groups [9]:

A. Natural products: Herbs (or botany), probiotics and vitamins and minerals. They are widely sold as dietary supplements.

B. Mind and body practices: techniques or procedures administered or taught by a coach or teacher.

C. Other complementary medicine approaches traditional healers, Ayurvedic medicine, traditional Chinese medicine, homeopathic and naturopathy.

Complementary and integrative medicine (MCI) in Mexico is commonly used together with medical treatment to improve the quality of life with the belief of reducing the disease and/or avoiding the effects and complications of the disease and the medical treatment used. Until now no law or sanction endorses or avoids the effects and complications of the disease and the quality of life with the belief of reducing the disease and/or not used for health maintenance and prevention, diagnosis, improvement and Treatment of physical and mental diseases [8].

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The Secretary of Health during the administration of 1989-1994 established the following Mexican Classification of Traditional Medicine to define regulations, by systematized criteria and following sanitary rules [11]:

A. Traditional medicine: Midwives, herbalists, and healers

B. Parallel medicines: Acupuncture, homeopathy, and chiropractic

Associations and acupuncturists were integrated into the program, human resources for education were formed and in 2002, NOM 172 SSA1 1998 “Provision of health services was published. Auxiliary activities Operation criteria for the practice of human acupuncture and related methods” [12]. The purpose of this study is to conduct a systematic review of the use of complementary therapy in patients with different types of cancer and the results reported in the world scientific literature with a minimum level of evidence of I.

Methods

This study was registered with the Local Committee of Ethics and Research 2301 of the Regional General Hospital No.3 of the City of Cancun, Quintana Roo, licensed to the Federal Commission for Protection against Health Risks in Mexico. It was held in 2017.

During the period from June to September 2017, a review and evaluation of the scientific literature was carried out, considering as inclusion criteria for the studies a maximum of five years old, minimum level of evidence of I, in the PubMed portal, Cochrane, Science Direct. The descriptors in English were used complementary therapy, cancer, alternative therapy and cervical cancer. Only studies conducted in humans and reported in full text were included.

Duplicate articles were used as elimination criteria, or that did not meet the criteria previously stated. The critical analysis of each article was carried out to integrate, the number of patients, the study design, the evaluation of the methodology and the results obtained.

Result

Plants have been used to cure multiple diseases over time. Medicinal plants contain chemical therapeutic components that produce a physiological action in the human body, many of which are antitumor [13]. Currently, the trend is in making natural products based on medicinal plants, which have been reported as effective, chemically balanced and with fewer side effects. 60% of this therapy is based on extracts from marine plants, microorganisms, and organisms [13].

Among the mind and body practices are yoga, chiropractic and osteopathic manipulation, meditation and massage therapy which are the most popular. There is also acupuncture relaxation techniques (breathing exercises, guided images, progressive muscle relaxation), tai chi, qi gong, therapeutic touch, hypnosis therapy and movement therapy (Feldenkrais method, Alexander technique, pilates, Integration Structural Rolfing and Psychophysical Integration Trager) [9]. Spiritual techniques are defined as the deep search for meaning and purpose in life and drive people to seek a connection with others and with an element greater than life [14].

Traditional Chinese medicine relies on two aspects to holistically control chronic degenerative diseases with Chinese herbalism and energy points. Its main focus is the various objectives involved in a particular disease by applying various modalities. With this, each condition is treated individually. Focused on cancer, they are based on chronic inflammation alterations resulting from the oxidative
stress of the endoplasmic reticulum which activates factors that cause cancer. Western medicine is reluctant to traditional Chinese medicine because of the lack of clinical trials that prove its efficacy with products of international quality [15-17].

Homeopathy is based on substances that can cause diseases or symptoms in healthy people, even taken in small amounts. In 2015, the National Health and Medical Research Council (NHMRC) published a statement where they state that there is no sustainable evidence for which homeopathy is effective. They indicate that it should not be used to treat chronic, serious or potentially serious conditions. People can put their health at risk if they refuse or delay the conventional treatment for which there is safe and effective evidence. For those who consider its use, they should first go to a certified doctor and those who already use it should go to their doctors and start using prescribed medications [18-24].

The provenance of the articles was reviewed with three from India, two from Germany, two from China and one from each of the following countries: Trinidad, Korea, Brazil, Australia, France, Turley, United States, and Mexico. Among these studies, various types of cancer were studied, including breast cancer in three studies, gynecological cancer in three studies, childhood cancer in one study, lung cancer in one study and cancer in general without specifying its origin in six studies (Table 1).

Table 1: E studies about alternative therapy.

<table>
<thead>
<tr>
<th>Nombre del artículo</th>
<th>Year</th>
<th>Author (Country)</th>
<th>Journal Article Design</th>
<th>Therapy Type</th>
<th># Patient</th>
<th>% Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herbal remedies and functional foods used by cancer patients attending onco-clinics in Trinidad [22]</td>
<td>2016</td>
<td>Yuri et al. [22]</td>
<td>BMC complementary and alternative medicine</td>
<td>Cross-sectional</td>
<td>MCI in cancer</td>
<td>150</td>
</tr>
<tr>
<td>Biologically based therapies are commonly self-prescribed by Brazilian women for the treatment of advanced breast cancer or its symptoms [24]</td>
<td>2013</td>
<td>Callado et al. [24]</td>
<td>Support Care Cancer</td>
<td>Cross-sectional</td>
<td>MCI in cancer</td>
<td>126</td>
</tr>
<tr>
<td>Complementary and Alternative Medicine Use in Women with Gynecologic Malignancy Presenting for Care at a Comprehensive Cancer Center [25]</td>
<td>2015</td>
<td>Reem et al. [25]</td>
<td>International Journal of Gynecological Cancer</td>
<td>Cross-sectional</td>
<td>MCI in gynecologic cancer.</td>
<td>2508</td>
</tr>
<tr>
<td>Use of non-conventional medicine two years after cancer diagnosis in France: evidence from the VICAN survey [26]</td>
<td>2017</td>
<td>Sarradon et al. [26]</td>
<td>J Cancer Surviv</td>
<td>Cohort</td>
<td>MCI in cancer</td>
<td>4349</td>
</tr>
<tr>
<td>Use of complementary and alternative medicine by patients with cancer: a cross-sectional study at different points of cancer care [27]</td>
<td>2016</td>
<td>Kleine et al. [27]</td>
<td>Med Oncol</td>
<td>Cross-sectional</td>
<td>MCI in cancer</td>
<td>506</td>
</tr>
</tbody>
</table>
According to the year in which the last modification of the definitions of complementary, alternative, integrative and unconventional therapy was established, during the search, it was necessary to alternately use these terms, especially in articles before 2016 to perform a broader search. A frequency of the use of complementary therapy was determined from 16.4% to 87%, being in France the place where it was last used and in the United States where it was most used. The type of therapy most used was the biological one found in seven articles, followed by mind-body therapy in two articles, which includes a study conducted in India where they report using yoga in 86% and in China where they used acupuncture and finally an article in France where they refer to the use of homeopathy in 64% [17,25-30].

When investigating the reason why they used complementary therapy, they reported in five articles an improvement in symptoms ranging from 73% to 78%, as well as a decrease in side effects associated with the use of conventional therapy in 75% of people. Articles were found about the use of different types of complementary therapy, among which were green tea, soursop, resveratrol, Basella rubra and Moringa oleifera. In an article from China they say that the use of green tea was not related to the quality of life or mood. Two studies carried out mention the effect of the use of extracts on cervical cancer cells. In an article from Korea, they report that the extract of the leaf of the Moringa oleifera reduces the proliferation of cervical cells and they have cytotoxic activity and in a study carried out in India in 2014 they mention that the extract of the bark has anticancer activity on the cells.

A study carried out in India in 2015 reports having found 81% in the extract of Basella rubra cytotoxic activity against cervical cancer. Unlike the other articles that focus on the results obtained in people, these studies do not mention the results obtained in people with a diagnosis of cancer [22,23,28,31-36]. The number of participants in the studies reviewed had a minimum of 100 patients, which was the study conducted in Mexico and a maximum of 4349 patients that was the study conducted in France [21,26].

Among the limitations found in the studies was the lack of information about the person who recommended the use of complementary therapy, as well as whether the patient told his treating doctor that they were using this type of therapy. A study in Germany was found where they mention that 51% of people who used complementary therapy, only 35% had informed their doctor. None of the studies found mention the use of complementary therapy from a bioethical point of view, so a study with this type of approach would be important [27]. A common denominator of all the studies was the conclusion they reached, where they refer it is necessary to carry out more studies in patients with cancer and a focus on the use of complementary therapy to know the frequency and effects it has on the person and about cancer.

**Conclusion**

In this review of articles, we find multiple studies focused on different types of cancer where we look for the frequency of the use of complementary therapy, the type of therapy used and if they had any benefit on the patient's symptomatology. We found that there was a frequency of the use of complementary therapy from 16.4% to 87% in seven articles. It was determined that of the articles that mentioned the use of complementary therapy, the most used type was biological in seven articles, followed by mind-body therapy in two articles and one that focuses on homeopathy. It can be determined that the use of complementary therapy ranges from 73% to 78% and is used to improve symptoms, have physical well-being and strengthen the immune system. With this, we can see that most patients did not use this therapy for managing your cancer, but to feel good. It is important to mention that, of the articles found, all patients already had an established medical treatment.

There were limitations on the terms used by various studies, among which they used complementary and alternative therapy as synonyms and interchangeable words. When conducting a more specific search on cervical cancer along with the use of complementary treatment, no studies were found that contained these characteristics. Therefore, there is a need for more studies with a high level of evidence that complement the benefit of the use of complementary therapy in women with cervical cancer.
References

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