

# CUIDADO É FUNDAMENTAL

Escola de Enfermagem Alfredo Pinto – UNIRIO

INTEGRATIVE REVIEW OF LITERATURE

DOI: 10.9789/2175-5361.rpcfo.v17.13728

## THE USE OF AURICULOTHERAPY AND/OR AURICULAR ACUPRESSURE IN THE ONCOLOGY FATIGUE TREATMENT: INTEGRATIVE REVIEW

*Uso de auriculoterapia e/ou acupressão auricular no tratamento da fadiga oncológica: revisão integrativa*  
*Uso de auriculoterapia y/o acupresión auricular en el tratamiento de la fatiga oncológica: revisión integrativa*

Gulnara Santana<sup>1</sup> Stefanie Griebeler Oliveira Autor<sup>2</sup> 

### RESUMO

**Objetivo:** identificar, na literatura, evidências científicas sobre o uso da auriculoterapia e/ou acupuntura auricular na fadiga oncológica. **Métodos:** revisão integrativa da literatura realizada nas bases PubMed/Medline, Scopus, Web of Science, BVS e Cochrane. Utilizaram-se os termos auriculoterapia OR acupuntura auricular, associados a fadiga AND oncologia. Critérios de inclusão: estudos que abordassem a temática. Após leitura na íntegra, três artigos foram incluídos e um foi adicionado por meio das referências, totalizando quatro. **Resultados:** dois estudos eram ensaios clínicos randomizados, um revisão integrativa e outro meta-análise com revisão sistemática. Todos demonstraram resultados positivos sobre a aplicação da auriculoterapia na fadiga oncológica. **Conclusão:** os artigos revisados apontam evidências positivas e consistentes quanto ao uso da auriculoterapia para redução da fadiga em pacientes oncológicos. Contudo, destaca-se a escassez de pesquisas nacionais sobre o tema, sugerindo a necessidade de novos estudos para fortalecer a prática baseada em evidências no contexto brasileiro.

**DESCRITORES:** Auriculoterapia; Acupuntura auricular; Fadiga; Oncologia.

### ABSTRACT

<sup>1,2</sup>Universidade Federal de Pelotas, Pelotas, Rio Grande do Sul, Brasil.

**Recebido em:** 07/01/2025. **Aceito em:** 24/04/2025

**AUTOR CORRESPONDENTE:** Gulnara Waleska Rubio Martinez Santana

**E-mail:** gulnarasantana@hotmail.com

**How to cite this article:** Santana GWMR, Oliveira SG. Use of auriculotherapy and/or auricular acupressure in the treatment of cancer-related fatigue: integrative review. R Pesq Cuid Fundam (Online). [Internet]. 2025 [cited year month day];17:e13728. Available from: <https://doi.org/10.9789/2175-5361.rpcfo.v17.13728>.



**Objective:** to identify, in the literature, scientific evidence on the use of auriculotherapy and/or auricular acupuncture in cancer-related fatigue. **Methods:** integrative literature review conducted in the PubMed/Medline, Scopus, Web of Science, BVS, and Cochrane databases. The terms auriculotherapy OR auricular acupuncture were used, combined with fatigue AND oncology. Inclusion criteria: studies addressing the theme. After full-text reading, three articles were included, and one additional article was identified through references, totaling four. **Results:** two studies were randomized clinical trials, one an integrative review, and one a meta-analysis with systematic review. All demonstrated positive outcomes regarding the use of auriculotherapy in cancer-related fatigue. **Conclusion:** the reviewed articles show positive and consistent evidence regarding the use of auriculotherapy to reduce fatigue in cancer patients. However, there is a lack of national studies on the topic, highlighting the need for further research to strengthen evidence-based practice in the Brazilian context.

**DESCRIPTORS:** Auriculotherapy; Auricular acupuncture; Fatigue; Oncology.

## RESUMEN

**Objetivo:** identificar en la literatura evidencias científicas sobre el uso de la auriculoterapia y/o acupuntura auricular en la fatiga oncológica. **Métodos:** revisión integrativa de la literatura realizada en las bases de datos PubMed/Medline, Scopus, Web of Science, BVS y Cochrane. Se utilizaron los términos auriculoterapia OR acupuntura auricular, combinados con fatiga AND oncología. Criterios de inclusión: estudios que abordaran la temática. Tras la lectura completa de los textos, se incluyeron tres artículos, y uno más fue identificado por referencias, totalizando cuatro. **Resultados:** dos estudios eran ensayos clínicos aleatorizados, uno revisión integrativa y otro un metaanálisis con revisión sistemática. Todos mostraron resultados positivos sobre el uso de la auriculoterapia en la fatiga oncológica. **Conclusión:** los artículos revisados presentan evidencias positivas y consistentes sobre el uso de la auriculoterapia para reducir la fatiga en pacientes oncológicos. Sin embargo, se destaca la escasez de estudios nacionales sobre el tema, lo que señala la necesidad de nuevas investigaciones.

**DESCRIPTORES:** Auriculoterapia; Acupuntura auricular; Fatiga; Oncología.

## INTRODUCTION

Cancer is a public health problem classified as a chronic degenerative disease and considered one of the main causes of death in the world population. In Brazil, the last decade has seen a significant improvement in the availability and quality of information on cancer incidence and mortality. Cancer surveillance, within the scope of actions to control non-communicable diseases, supported by the best information available, obtained from cancer registries (population and hospital) and the Mortality Information System (SIM), provides support for managers to monitor and organize actions to control cancer, as well as directing cancer research.<sup>1</sup>

For Brazil, the estimate for the three-year period from 2023 to 2025 shows that there will be 704,000 new cases of cancer, 483,000 if cases of non-melanoma skin cancer are excluded.<sup>1</sup> The distribution of incidence by geographic region shows that the South and Southeast concentrate around 70% of the incidence. In men, prostate cancer is predominant in all regions, followed by colon and rectal cancer. In women, breast cancer is the most common. Colon and rectal cancers are the second or third most frequent, but in the lower HDI regions, cervical cancer remains in second place.<sup>1</sup>

One of the relevant symptoms related to cancer, with a negative impact on the patient's quality of life, is fatigue, which is defined as a disturbing subjective and persistent feeling of tiredness and physical, emotional and/or cognitive exhaustion, disproportionate to the level of physical activity and which interferes with the patient's functional status. It differs from everyday fatigue, which is temporary and relieved by rest. Its prevalence can be as high as 95%, and there is great variability in studies depending on the diagnostic criteria used. Fatigue is classified as primary and secondary. The former is due to the disease itself, i.e. it is part of the clinical picture regardless of the action of other factors unrelated to the disease itself. Secondary fatigue is the result of concomitant syndromes, comorbidities or the treatment of the underlying disease itself.<sup>2</sup>

Despite its high prevalence and high impact on the patient, fatigue is poorly diagnosed and treated by doctors. The pathophysiology of cancer-related fatigue is poorly understood, but several causes can overlap and contribute to the worsening of this symptom.<sup>3</sup> It is a common symptom in patients undergoing treatment for cancer, and practically everyone who has undergone chemotherapy, radiotherapy, bone marrow transplantation or treatment with biomarkers.<sup>4</sup>

A systematic review and meta-analysis of 129 studies with 71,568 patients reported a prevalence of fatigue of 49%.<sup>5</sup> According to a survey of 1569 cancer patients, the symptom is reported in 80% of individuals who have undergone chemotherapy and/or radiotherapy.<sup>6</sup> In patients with metastases, the prevalence is as high as 75%.<sup>7</sup> Moderate or severe fatigue was reported in 983 of 2177 patients (45%) who were being followed up and 150 of 515, i.e. 29% of those in remission from breast, prostate, colorectal and lung cancer.<sup>8-9</sup>

Acupuncture/Traditional Chinese Medicine has been included since the first version of the National Policy for Integrative and Complementary Practices (PICS). Ministerial Ordinances No. 971 of May 3, 2006<sup>10</sup> and No. 1,600 of July 17, 2006 of the National Policy for Integrative and Complementary Practices (PNPIC).<sup>11</sup> It is an ancient Chinese technique where archaeological findings show that it probably dates back at least 3,000 years. The Chinese name zhen jiu, which means needle (zhen) and heat (jiu), was adapted in the reports brought back by the Jesuits in the 17th century as acupuncture (derived from the Latin words acus - needle and punctio - puncture). The therapeutic effect of stimulating neuroreactive zones or “acupuncture points” was initially described and explained in the language of the time, symbolically and analogically, in line with classical Chinese philosophy.<sup>11</sup>

Auriculotherapy is one of the integrative practices offered under the Unified Health System (SUS), instituted by the National Integrative Practices Policy (PNPIC). It is one of the techniques used by acupuncture within Traditional Chinese Medicine, with the aim of promoting the psychorganic regulation of the individual through stimulation of the energy points located in the ear, in which the whole organism is represented as a microsystem, and can be carried out in a complementary way to conventional therapy.<sup>12,4;13</sup> Materials such as mustard seeds, needles or crystals are used in auricular application. This practice can also be called auricular compression, where the simple act of pressing specific points on the ear, using seeds or not, can be used easily and safely, with minimal adverse effects.

Considering the complaints of oncological fatigue in cancer patients and the possibility of using non-invasive, economical and safe means to treat these patients, in this integrative review we sought to find out what has been published on auriculotherapy and fatigue and its applications.<sup>13</sup> Auriculotherapy is an effective means of treatment for pain, nausea, insomnia and depression that is widely used and has excellent evidence in the literature.<sup>12</sup> Some guidelines address acupuncture and acupressure as viable and necessary treatments for patients in cancer care, pointing out benefits

in the treatment of fatigue and in patients in palliative care.<sup>4</sup> Therefore, the main question of this study is what is the most important literature on the practice of auriculotherapy and/or auricular acupressure in the treatment of cancer fatigue? The aim of this integrative review is to find out what is available in the published literature on the use of auriculotherapy and/or auricular acupressure in the treatment of cancer fatigue.

## METHOD

This is an integrative review, using the six stages proposed by Mendes, Silveira and Galvão.<sup>15</sup> The first stage was to identify the topic and select the research question; the second stage was to establish the inclusion and exclusion criteria; the third was to define the information to be extracted from the studies and its categorization, using a database with content prepared in categories. In the fourth stage, the studies were evaluated, and after interpreting and discussing the results of these included articles, the integrative review and its results were presented. The PICO strategy (population, intervention, comparison and outcomes) was used. The use of this strategy makes it possible to identify keywords that will help locate the studies in the database. Therefore, P consists of cancer patients with complaints of fatigue, I consists of the use of auriculotherapy in this group of people, C does not apply, and O is the outcome/result of the application. The databases used were PUBMED (US National Library of Medicine), Scopus, Web of Science, VHL (National Health Library) and Cochrane.

As described in the Flowchart, the database search took place from March to April 2024 using the following search strategies: in PUBMED “auriculotherapy” [MeSH terms] AND “fatigue” [MeSH terms] AND “medical oncology” [MeSH terms] with no results found; “fatigue” [MeSH terms] AND “medical oncology” [MeSH terms], with 15 abstracts; “auriculotherapy” [MeSH terms] AND “fatigue” [MeSH terms] with 25 abstracts found; We then searched using the Boolean strategy “auriculotherapy” [MeSH terms] OR auricular ear acupuncture [MeSH terms] AND “oncology” [MeSH terms], with five results; “auriculotherapy” [MeSH terms] AND “fatigue” [MeSH terms] AND “oncology” [MeSH terms] with three abstracts found. In Scopus, Keywords “auriculotherapy” AND “fatigue” with nine results.

On Web of Science, we used the following descriptors: (auriculotherapy) AND (fatigue), with four results and used a Boolean strategy with (auriculotherapy) OR (auricular ear acupuncture) AND (fatigue), obtaining 33 abstracts. In Cochrane, we used Auriculotherapy OR auricular ear acupuncture AND fatigue OR asthenia with only two abstracts,

but when we changed the search strategy to Auriculotherapy OR auricular ear acupuncture AND fatigue, we obtained 81 results, for a total of 177 abstracts and titles.

As a complement, we searched the Virtual Health Library (VHL) database, with the following Decs/MeSH: Auriculotherapy AND fatigue, with three results, which were then incorporated into the final result, with a total of 180 titles.

To compose the final discussion, we used research into gray literature to help with the description and argumentation.

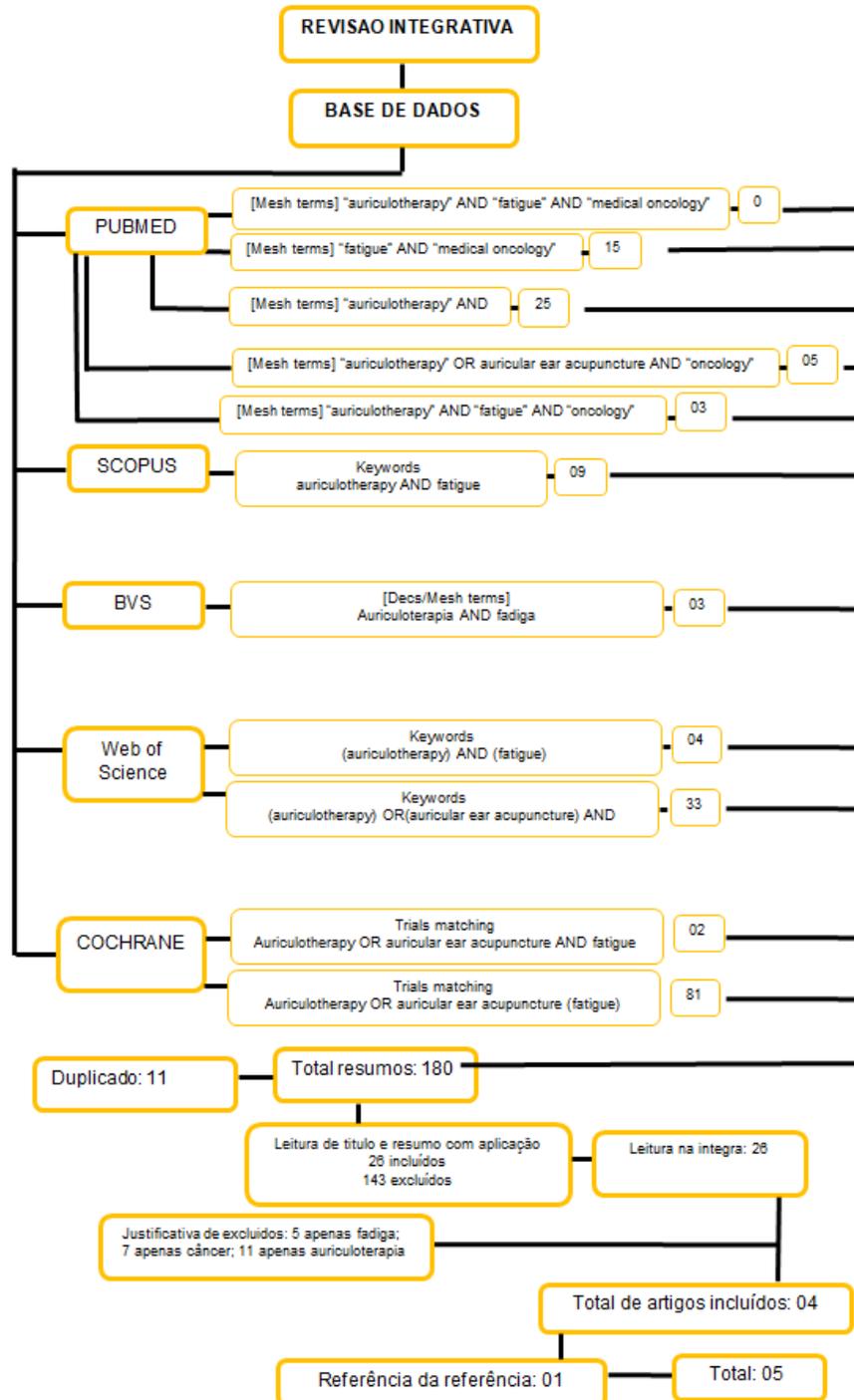
The articles included had to address the topics of cancer fatigue and auriculotherapy, auricular acupuncture or auricular acupressure in English, Spanish and Portuguese. The articles excluded were studies that addressed only fatigue or auriculotherapy in isolation or cited other interventions such as acupuncture, electroacupuncture or other forms of treatment other than auriculotherapy. We decided not to demarcate the time period so that the results could be expanded.

Of the 180 titles and abstracts in the databases, after reading the titles and abstracts and applying the exclusion criteria, we were left with 26 articles to read in full. Of these 26 articles, after thorough reading and evaluation, five studies

were excluded because they only dealt with the subject of fatigue, seven because they only dealt with cancer, and 11 because they mentioned auriculotherapy, but in treatments for manifestations other than fatigue. This resulted in four articles that supported our Integrative Review objective. While reading the articles, we identified an important reference for our research in the bibliographical references of one of them, which we decided to attach as a reference to the reference, making a total of five articles to make up the review.

The extracted content was organized using Microsoft Excel as follows: Reference, Authors, Year of publication, Type of article (Integrative Review, Systematic, Narrative, Original or case study), Sex of first author, Country of research described in Table 1, Type of research (quantitative/quali), Methodological design, Number of participants, Number of sessions within the study protocol, Auricle points used, Other techniques used, Challenges of the studies and Main results described in Table 2.

The analysis is presented in numerical form through the characterization of the articles, and in content form, according to thematic approaches.



## RESULTS

Of the five articles included in this review, four were original articles and one was an integrative literature review. It was possible to observe that there was no country with a greater predominance of studies on the proposed research topic, where the randomized studies were in the

United States, China, Taiwan, Australia and England and in the integrative review study carried out in Brazil, the author evaluated articles mostly from China, a total of 11 and one from France.<sup>12</sup> It is noteworthy that in the included review article, the predominance of first authors was male, in a total of three men and two women. Further characteristics of the included publications can be seen in the table below:

**Table 1** - Methodological characterization of the studies

Ord.	Reference	Country	Type of research	Methodological design	Number of sessions	Ear points	Use of other techniques
1	Lin et al, 2021	China	Quantitative	Randomized Study	9 sessions	5 auricle points (lung / Shen Men / subcortex / liver / spleen)	care routine
2	Contim et al, 2020	Brazil	predominance of quantitative studies	Integrative Literature Review	Not mentioned	various articles describe the auricle points used	acupressure/ cryotherapy
3	Yeh et al, 2016	USA	Quantitative	Randomized Study	4 sessions/ 1 month follow up	Master points (used for each participant) /Shenmen / Sympathetic / Occipital /Subcortex / Neurasthenia points/area /anxiety / corresponding points for pain (varying for each participant)	no
4	Hao Tian et al, 2023	China/ Taiwan	Quantitative	Meta analysis	1 to 10 sessions	Many points used	electroacupuncture/ TENS
5	Tan et al, 2021	Australia	Quantitative	Meta analysis	ranged from 2 to 20 weeks, 1 to 2 times a week	articles cite several points	somatic acupressure / sham acupuncture / moxa

The number of participants varied greatly between the studies (from 31 to 100 in total and sessions between 1 and 20 sessions, with an average of 10 sessions prevailing in most studies.

The most frequently used auriculotherapy or auricular acupressure points were Shen men, Subcortex, Sympathetic, Liver and Heart, followed by Lung, Kidney, Zero Point, Occipital, Spleen and Anxiety.

**Table 2** - Characterization of the results

ord.	Reference	Adverse effects	Challenges	Key results
1	Lin et al, 2021	no citation	Limitations regarding the number of patients. Patients were lost and there was no follow up (no mention of group C - control).	group B (magnets) had better results than group A (seeds), but it seemed that, in general, there was improvement in both groups

ord.	Reference	Adverse effects	Challenges	Key results
2	Contim et al, 2020	Eighty-seven clinical trials considered short-term, mild and tolerable reactions, such as: local discomfort, transient pain, local skin irritation and, in rare cases, dizziness and minor bleeding. Some of these symptoms were potentially avoidable and no serious adverse effects were detected	the amount of research on this subject is still limited, especially in Brazil. There is also a limitation in terms of the quality of the studies carried out, since of the eleven articles found, only three had a high level of evidence	all the articles showed good results for the use of auriculotherapy in cancer patients
3	Yeh et al, 2016	minimal adverse effects : pain / local irritation / discomfort / etc.	Participation was 81%, with losses in both groups due to hospitalization and the patient not having enough time to go to the treatment site, and one due to an allergic reaction.	71% improvement for pain, 44% for fatigue, and 31% for insomnia for the acupressure group
4	Hao Tian et al, 2023	Mild to severe effects such as bronchospasm, hypotension, renal failure, intestinal obstruction and vomiting have been reported	Small sample size and bias in fatigue scores / Language limitations with some articles being in Chinese / Quality of studies	The studies showed that the application of acupressure + general care showed 100% benefits and good results, followed by application points + general care and manual acupuncture + application points.
5	Tan et al, 2021	5 studies showed adverse effects: headache / mild bruising / palpitations	Small samples, despite meta-analysis being a good research tool and methodological quality of the studies	The study demonstrates that the latest evidence of somatic acupuncture significantly contributed to the improvement of patients with cancer fatigue, future implications in practice and research protocols that can be tested will be important.

Overall, the responses were positive for auriculotherapy in patients complaining of cancer fatigue. In Lin's study<sup>16</sup>, despite the limitations in terms of the number of participants, where some patients were lost and a follow-up was not contemplated, the two groups (magnets and seeds) obtained good results against the control group (routine care), with the magnet group having a slightly better response than the seed group. In the original article, Yeh<sup>17</sup> recruited 31 participants divided into an active and control group, with four treatment sessions and a follow-up after one month. Here, in addition to fatigue, they looked at complaints such as pain and insomnia. There was a 71% improvement in pain, 44% in fatigue and 31% in insomnia. There were some adverse effects such as irritation, discomfort and local pain.

Tian, in the Bayesian Meta analysis, shows 100% improvement after the application of acupressure associated with general care, not specifying ear points, despite some biases related to the research such as a language barrier, since most of the articles were in Chinese, small sample data and they also cite possible bias regarding the scores used to assess Fatigue.<sup>18</sup>

In another article by Tan<sup>19</sup> the sessions ranged from 2 to 20 applications, with a frequency of one to two a week, using somatic acupressure, sham acupuncture and moxa, with promising and positive results, five studies showed adverse effects such as headache, mild bruising and palpitations. The samples were small, although meta-analysis is a good tool for researching the methodological quality of the studies. This study showed that the latest evidence of somatic acupuncture

significantly contributed to the improvement of patients with cancer fatigue.

In the Integrative Review, Contim<sup>12</sup> shows that all the articles evaluated present promising results regarding the use of auriculotherapy, despite the limitations in relation to the quality of the studies carried out and the quantity of research on this subject, which is still limited, especially in Brazil.

There have been reports of adverse effects such as: hypoesthesia or hyperesthesia after acupressure, local discomfort, transient pain, local skin irritation, headache, palpitations and, in rare cases, dizziness, minor bleeding, bronchospasm, hypotension, renal failure, intestinal obstruction and vomiting have been reported.<sup>12;19;18</sup>

## DISCUSSION

In this Integrative Review, we observed that although there are many studies on the subject of acupuncture in cancer patients, we found few when we summarized auriculotherapy or auricular acupuncture in cancer treatment, and fewer when the focus turned to the subject of cancer fatigue, as shown in the Flowchart above. Some studies addressed other complaints such as insomnia, pain and depression with promising results and, secondarily, positive responses to fatigue.

Two articles came from the Asian continent and, in the Integrative Review carried out in Brazil, most of the research was oriental, which can be attributed to the consolidated cultural acceptance of Traditional Chinese Medicine (TCM) not only by patients but also by health professionals.<sup>12;16;20;18</sup>

At the same time as we see more male than female authors, according to a 2009 survey by the United Nations Educational Scientific and Cultural Organization (UNESCO), only 29% of researchers worldwide are women. Although studies on the participation of women in various scientific fields are in their infancy, the progress made in recent decades has been remarkable. According to the Directory of Research Groups in Brazil, which is administered by the CNPq, in 1995, 39% of national researchers were women, a percentage that reached 47% in 2004 and, in 2010, the ratio between men and women was similar, although the data points to a growing increase in female participation.<sup>20</sup>

One of the relevant cancer-related symptoms with a negative impact on the patient's quality of life is Fatigue, which is defined as a disturbing subjective and persistent feeling of tiredness and physical, emotional and/or cognitive exhaustion, disproportionate to the level of physical activity and which interferes with the patient's functional status. It differs from everyday fatigue, which is temporary and relieved by rest. Its

prevalence can be as high as 95%, and there is great variability in studies depending on the diagnostic criteria used. Fatigue is classified as primary and secondary. The former is due to the disease itself, i.e. it is part of its clinical picture regardless of the action of other factors unrelated to the disease itself. Secondary fatigue is the result of concomitant syndromes, comorbidities or the treatment of the underlying disease itself.<sup>2</sup>

Despite its high prevalence and high impact on the patient, fatigue is poorly diagnosed and treated by the multidisciplinary team. Its cancer-related pathophysiology is poorly understood, but several causes can overlap and contribute to the worsening of this symptom.<sup>3</sup>

Acupuncture/Traditional Chinese Medicine has been included in Brazil since the first version of the National Policy for Integrative and Complementary Practices (PICS). Ministerial Ordinances No. 971 of May 3, 2006 and No. 1.600, of July 17, 2006 of the National Policy for Integrative and Complementary Practices (PNPIC)<sup>10</sup>, suggest some important guidelines such as: Structuring and strengthening TCM-Acupuncture (Traditional Chinese Medicine) care in the SUS, with incentives for the insertion of TCM-Acupuncture at all levels of the system with an emphasis on primary care, dissemination and information of the basic knowledge of TCM/Acupuncture for users, health professionals and SUS managers, integration of TCM/Acupuncture actions with related health policies, among others. It is a practice approved as a specialty for physiotherapy professionals according to Resolution no. 60 of 22/06/1985, Federal Council of Physiotherapy and Occupational Therapy.<sup>18</sup>

In this context, the advancement and development of Integrative and Complementary Practices (ICPs) have been gaining ground and are seen as a way of expressing new forms of treatment and well-being, at low cost, non-invasive, easy to apply and use, aiming at the collective and humanized practice.

Auriculotherapy is part of a set of TCM techniques, along with acupuncture, with the aim of promoting the psychic-organic regulation of the individual through stimulation of the energy points located in the auricular pavilion, in which the whole organism is represented as a microsystem, and can be carried out in a complementary way to conventional therapy.<sup>12;4;13</sup> To carry out this technique, needles, crystals, mustard seeds, among others, are used. They act by stimulating the sensitive fibers of the Peripheral Nervous System (PNS), triggering an electrical transmission in the neurons, which when it reaches the Central Nervous System (CNS), causes the release of substances that will help improve the patient's well-being.<sup>21</sup>

The auricular points used in various studies include Shen men, Subcortex, Sympathetic, Liver, Heart, Lung, Kidney, Zero

Point, Occipital, Spleen and Anxiety, but without a description of the purpose of each point used. This demonstrates the lack of a specific treatment protocol for complaints of fatigue in cancer patients.

Lin mentions that “Lixu Yuanjuian”, written by Yishi Wang in the Ming Dynasty, the first and most famous treatise on fatigue, shows the use of the Lung (P), Liver (F) and Spleen (B) points as the three key elements for treating fatigue.<sup>16</sup>

In Modern Traditional Chinese Medicine theory, cancer fatigue in patients undergoing chemotherapy treatment includes Liver and Stomach deficiency, Qi and Blood deficiency, Qi stagnation, Blood stasis and Liver and Stomach disharmony. In the auricle, the P point has the function of re-establishing and replenishing the Qi of the P, promoting blood circulation, the Shen Men (SH) can calm the mind and relieve fatigue, having an anti-inflammatory and analgesic effect, the Brainstem (TC) point is widely used for sedation, the Subcortex can produce calm and analgesia, modulating the autonomic nervous center and inhibiting the cortex and subcortex. The F point can disperse stagnant Qi, promoting the flow of Bile and harmonizing the stomach. B is the source of life, and its deficiency can result in insufficient Qi and blood, stimulating it can improve immunity, Sympathetic (S) seeks general balance and regulation of sympathetic and parasympathetic function, acting on neurovegetative activity.<sup>16</sup>

In the articles reviewed, auriculotherapy obtained promising results not only for fatigue, but also for other complaints such as insomnia and pain, where points such as the Liver (F), Stomach (E) and Qi are deficient or stagnant, promoting disharmony and consequently worsening fatigue. The Lung (P) seeks to re-establish the harmony of the Qi, helping with blood circulation, consequently improving mood and reducing the risk of depression, along with Shen Men (SH), which is an anti-inflammatory point and is often used to calm the mind. The Spleen (B) is responsible for balancing the blood and its deficiency will alter immunity, and the Sympathetic (S) works to regulate neurovegetative activity, as described above by Lin (2021). And so many other points mentioned in the papers, demonstrating that each patient is unique and must be assessed, taking into account their complaint at the time.<sup>12;16</sup>

The adverse effects reported were hypoesthesia or hyperesthesia after acupressure, local discomfort, transient pain, local skin irritation, headache, palpitations and, in rare cases, dizziness, minor bleeding, bronchospasm, hypotension, kidney failure, intestinal obstruction and vomiting. Contim cites that in 81 articles, there were mild and short-term effects, and Tan cites that in 5 studies, there were mild symptoms.<sup>12;19</sup> In only one article, Tian presented more severe cases of

bronchospasm and even kidney failure.<sup>18</sup> Interventions using auriculotherapy or auricular acupuncture are more affordable than conventional treatments. Its ease of integration into clinical practice makes it an effective alternative for promoting and recovering health. In addition, it is a technique with few side effects, manifesting in rare situations in moderate to severe effects, when compared to other treatments, representing a favorable cost/benefit ratio.<sup>20</sup>

In our society, the mercantilist vision prioritizes spending money and time on research focused on diseases and medicine, fragmenting the patient’s treatment into specialties, fails to provide for the patient’s general well-being.<sup>12</sup> Interventions, in the Traditional Chinese Medicine approach, should be holistic and comprehensive, considering the individual as a whole, that is, integrally, rather than focusing solely on specific diagnoses and treatments.

## CONCLUSION

The aim of this integrative review was to look at the latest scientific literature on the subject of auriculotherapy in oncological fatigue and few specific studies were found, despite the fact that auriculotherapy and acupuncture are the focus of new work and are recognized by the World Health Organization and the Pan American Health Organization (WHO/PAHO) as complementary treatment in oncology and health care as a whole, considering the individual in their integrality, uniqueness and complexity, taking into account their complaint, contributing to the humanization of care.<sup>23</sup>

It should be noted that this is a subject that is expanding and is the focus of Integrative Reviews around the world, with a scarcity of studies on this subject, which makes it difficult to carry out a complete analysis, with specific and reliable protocols.

Fatigue, therefore, becomes an important complaint for cancer patients, as it is limiting and considerably reduces their quality of life. No less important complaints, such as pain, insomnia and depression, are already being widely addressed with good results.

Therefore, there is a vast field of study in the use of auriculotherapy as an effective, safe and easy-to-apply treatment for fatigue in cancer patients and its results.

## REFERENCES

1. Brasil. Ministério da Saúde. Instituto Nacional de Câncer. Estimativa 2023: incidência de câncer no Brasil [Internet].

- Rio de Janeiro: INCA; 2022 [acesso em 15 de junho 2024]. Disponível em: <http://www.inca.gov.br>.
2. Consenso Brasileiro de Fadiga. Rev Bras Cuidados Paliativos. [Internet]. 2010;3(2 Suppl 1).
  3. Carvalho RT, Parsons HA. Manual de cuidados paliativos. 2. ed. Porto Alegre: Sulina; 2012.
  4. National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology (NCCN Guidelines®): cancer-related fatigue. Version 2.2023. [Internet]. 2023 [cited 2024 sep 5]. Available from: <https://www.nccn.org/guidelines/guidelines-detail?category=3&id=1424>.
  5. Maqbal MA, Sinani DMA, Naamani ZA, Badi KA, Tanash MI. Prevalence of fatigue in patients with cancer: a systematic review and meta-analysis. J Pain Symptom Manage. [Internet]. 2020 [cited 2024 sep 5];61(1). Available from: <https://doi.org/10.1016/j.jpainsymman.2020.07.037>.
  6. Henry DH, Viswanathan HN, Elkin EP, Traina S, Wade S, Cella D. Symptoms and treatment burden associated with cancer treatment: results from a cross-sectional national survey in the U.S. Support Care Cancer. [Internet]. 2008 [cited 2024 sep 5];16. Available from: <https://doi.org/10.1007/s00520-007-0380-2>.
  7. Hofman M, Ryan JL, Figueroa-Moseley CD, Jean-Pierre P, Morrow GR. Cancer-related fatigue: the scale of the problem. Oncologist. [Internet]. 2007 [cited 2024 sep 5];12 Suppl 1. Available from: <https://doi.org/10.1634/theoncologist.12-S1-4>.
  8. Wang XS, Zhao F, Fisch MJ, O'Mara AM, Cella D, Mendoza TR, et al. Prevalence and characteristics of moderate to severe fatigue: a multicenter study in cancer patients and survivors. Cancer. [Internet]. 2014 [cited 2024 sep 5];120. Available from: <https://doi.org/10.1002/cncr.28434>.
  9. Brasil. Ministério da Saúde. Portaria nº 971, de 3 de maio de 2006. Política Nacional de Práticas Integrativas e Complementares no SUS [Internet]. [acesso em 10 de novembro 2023]. Disponível em: [https://bvsms.saude.gov.br/bvs/saudelegis/gm/2006/prt0971\\_03\\_05\\_2006.html](https://bvsms.saude.gov.br/bvs/saudelegis/gm/2006/prt0971_03_05_2006.html).
  10. Brasil. Ministério da Saúde. Portaria nº 1600, de 17 de julho de 2006. Política Nacional de Práticas Integrativas e Complementares [Internet]. [acesso em 10 de novembro 2023]. Disponível em: [https://bvsms.saude.gov.br/bvs/saudelegis/gm/2006/prt1600\\_17\\_07\\_2006.html](https://bvsms.saude.gov.br/bvs/saudelegis/gm/2006/prt1600_17_07_2006.html).
  11. Brasil. Ministério da Saúde. Política Nacional de Práticas Integrativas e Complementares no SUS. 2. ed. Brasília: Ministério da Saúde; 2015 [acesso em 15 de junho 2024]. Disponível em: <http://www.saude.gov.br/bvs>.
  12. Contin CLV, Espírito Santo FH, Moretto IG. Applicability of auriculotherapy in cancer patients: an integrative literature review. Rev Esc Enferm USP. [Internet]. 2020 [cited 2024 sep 5];54. Available from: <https://doi.org/10.1590/S1980-220X2019001503609>.
  13. Jang A, Brown C, Lamoury G, Morgia M, Boyle F, Marr I, et al. The effects of acupuncture on cancer related fatigue: updated systematic review and meta-analysis. Integr Cancer Ther. [Internet]. 2020 [cited 2024 sep 5];19. Available from: <https://doi.org/10.1177/1534735420931294>.
  14. UNIC. Manual de cuidados paliativos em pacientes com câncer. 1. ed. Rio de Janeiro: UNIC; 2009.
  15. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto Contexto Enferm. [Internet]. 2008 [acesso em 5 de setembro 2024];17(4). Disponível em: <https://doi.org/10.1590/S0104-07072008000400018>.
  16. Lin L, Zhang Y, Qian HY, Xu JL, Xie CY, Dong B, et al. Auricular acupressure for cancer-related fatigue during lung cancer chemotherapy: a randomised trial. BMJ Support Palliat Care. [Internet]. 2021 [cited 2024 sep 5];11(1). Available from: <https://doi.org/10.1136/bmjspcare-2019-001945>.
  17. Yeh CH, Chien LC, Lin WC, Bovbjerg DH, Van Londen GJ. Pilot randomized controlled trial of auricular point acupressure to manage symptom clusters of pain, fatigue, and disturbed sleep in breast cancer patients. Cancer Nurs. [Internet]. 2016 [cited 2024 sep 5];39(5). Available from: <https://doi.org/10.1097/NCC.0000000000000318>.
  18. Tian H, Chen Y, Sun M, Huang L, Xu G, Yang C, et al. Acupuncture therapies for cancer-related fatigue: a Bayesian network meta-analysis and systematic review. Front Oncol. [Internet]. 2023 [cited 2024 sep 5];13. Available from: <https://doi.org/10.3389/fonc.2023.1113985>.
  19. Tan JYB, Wang T, Kirshbaum MN, Zhao I, Yao LQ, Huang HQ, et al. Acupoint stimulation for cancer-related fatigue: a quantitative synthesis of randomised controlled trials. Complement Ther Clin Pract. [Internet]. 2021 [cited 2024 sep 5];45. Available from: <https://doi.org/10.1016/j.ctcp.2021.101389>.
  20. Sant'Anna LS, Sawada NO, Dias JPB, Freitas PS, Lopes ECL. Auriculoterapia em pacientes com câncer de mama em tratamento quimioterápico: revisão integrativa. Rev Contrib Cienc Sociais. [Internet]. 2024 [acesso em 5 de setembro 2024];17(4). Disponível em: <https://revistacientifica.uiclap.com/index.php/contribuciones/article/view/12345>

21. Silva CP, Silva AC, Oliveira MN, Cruz EH, Silva JCP, Nóbrega MS, et al. Benefits of auriculotherapy in the treatment of symptoms in people diagnosed with cancer: integrative review. *Res Soc Dev*. [Internet]. 2022 [cited 2024 sep 5];11(12). Available from: <http://dx.doi.org/10.33448/rsd-v11i10.32743>.
22. Conselho Federal de Fisioterapia e Terapia Ocupacional (COFFITO). Resolução nº 60, de 22 de junho de 1985. [Internet]. [acesso em 30 de outubro 2023]. Disponível em: <https://www.coffito.gov.br/nsite/?p=1360>.
23. Organização Pan-Americana da Saúde (OPAS). Medicinas tradicionais, complementares e integrativas. [Internet]. [acesso em 26 de agosto 2024]. Disponível em: <https://www.paho.org/pt/topicos/medicinas-tradicionais-complementares-e-integrativas>.