

Acupuncture In The Treatment Of Endometriosis: Narrative Review

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ABSTRACT

The primary goal of the corresponding study is to address an important story and literature review in the field of women's health physiotherapy, specifically about the use of acupuncture for the management of endometriosis. Given the authors' support, physical therapy can be a powerful ally for women's health, particularly in cases where patients have endometriosis. It offers a range of treatment options, including acupuncture, protocols that promote healing and lessen the adverse effects of medication, and the ability to relieve pain, which enhances the individual's standard of life. Research on the benefits of physiotherapy for female health, particularly when combined with acupuncture to treat endometriosis, becomes more effective in this way. As a result, further research and studies on this subject may bear fruit. They will emphasize the value of acupuncture as a natural remedy for endometriosis side effects and symptoms. Medications are used during therapy, given that acupuncture can reduce pain and enhance the local inflammatory response of endometriosis foci when applied to specific body locations.

Keywords: Endometriosis; Acupuncture; Health; Women; Physiotherapy

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1. INTRODUCTION

A harmless, progressive, recurrent, and persistent gynecological illness is endometriosis. It is characterized by endometrial tissue (stroma and glands) implanted beyond the uterine cavity and can be found in various extrapelvic and pelvic organs and tissues. Thus, the relevant study addresses the following topic: Treatment of endometriosis with acupuncture in the focus area: Women's health benefits from physiotherapy. On the other hand, endometriosis may show up asymptomatic or with vague symptoms. When dysmenorrhea, pelvic discomfort, dyspareunia, and infertility are present, these are the key signs and symptoms [1, 2].

These clinical signs can lead to emotional harm in relationships with coworkers, spouses, and family members and can differ based on the endometrial tissue's place of implantation. Consequently, this effort aimed to respond to the following query: How may endometriosis be treated with acupuncture? One of the theories underlying this study is that physical therapy can be a powerful ally for women's well-being, particularly in cases where patients have endometriosis. This is because physiotherapy offers a variety of treatment options, including acupuncture, protocols that promote healing and lessen the adverse effects of medication, and the ability to relieve pain, which enhances the individual's standard of life

There are no sources in the current document.[3, 4].

Given these considerations, this study has the general objective: to analyze acupuncture use in women with endometriosis. The Specific Objectives guiding this work are: - to clarify the effects that endometriosis can have on women of childbearing age and to analyze the effectiveness of physiotherapy on women's health using acupuncture techniques in endometriosis. Therefore, it is essential to highlight that despite the damage caused by endometriosis, there are ways to treat it, which can be done through surgery and medications. Still, some studies include that acupuncture should also be considered, such as Its goal is to provide analgesia and minimize side effects caused by medications [5, 6]

Research on the benefits of physical therapy for women's well-being, especially when combined with acupuncture to treat endometriosis, becomes more effective in this way. Research on this subject is thought to produce results in the future that will highlight the value of acupuncture as a natural way to reduce endometriosis symptoms as well as medication side effects. During therapy, keep in mind that acupuncture might reduce pain and enhance the local inflammatory response of endometriosis foci when it is administered at specific body locations [7, 8].

2. METHODOLOGY:

Methodology is an investigation of how things are put together, how to do research or an investigation, or how to accomplish science. According to its etymology, it refers to studying the procedures and resources utilized in scientific research. It also depends on the knowledge and nature of the researcher, which can make numerous types of research possible. For the development of this work, bibliographic and qualitative research was used to seek information based on books, articles, degree theses, academic thesis works, and monographs to develop a review of the literature on the topic in question to carry out a critical evaluation of the studies and the scientific basis of the work [9, 10].

Regarding the approach used for the research, qualitative research was used, as no statistical methods or data were used. According to Gerhart and Silveira, qualitative research is not about numerical representation but rather about deepening the understanding of a social group, an organization, etc. Regarding the data collection methods, a bibliographical review was carried out, reading legal sources linked directly or indirectly to the topic covered. As Koche explains, data collection procedures are practical methods to collect information necessary to construct reasoning around a fact, phenomenon, or process. Among the legal documents, data obtained by collecting scientific articles, periodicals, and secure websites were used [11, 12].

The following databases were consulted: Scientific Electronic Library Online (SCIELO) and Google Scholar, which allow simultaneous research from the leading national and international sources. The data were collected only from national sources and made available in total. The documents were searched and selected using the keywords Endometriosis; Acupuncture; Physiotherapy; Oriental Medicine; Analgesia; Endometriosis; Acupuncture; Physiotherapy; Oriental Medicine. Incomplete articles in which only the abstract is available, data in languages other than English, titles that do not correspond to the descriptors, articles without reference to the author, as well as texts without elements relevant to the scope of the respective study [13, 14].

3. THEORETICAL FOUNDATION:

BRIEF DEFINITION OF ENDOMETRIOSIS:

A benign, progressive, recurrent, and chronic gynecological illness is endometriosis. It is the existence of endometrial tissue (stroma and glands) transplanted beyond the uterine cavity; these structures and organs can be found in different parts of the pelvis and extrapelvic region. Santos claims that endometriosis is a chronic illness that impacts women who can procreate. It is characterized by the endometrial tissue that is present outside of the uterus. Usually lining the uterine cavity, this tissue grows at the start of the menstrual cycle, changes after ovulation to facilitate the potential embryo's implantation, and is expelled during menstruation to regenerate in the next cycle. Similar responses are seen in tissue outside the uterus, so successive periods of development and loss (hemorrhage) cause inflammation and fibrosis [15-17].

Endometriomas, accumulations of blood, and endometrium cell debris are sometimes linked to these conditions and are dubbed "chocolate cysts" because of their dark brown content. Endometriosis can present with non-specific manifestations or even be asymptomatic. When present, the main signs/symptoms are dysmenorrhea, pelvic pain, dyspareunia, and infertility. These clinical manifestations can vary depending on the site of implantation of the endometrial tissue and cause emotional damage in work, marital, and family activities. The symptomatic picture of endometriosis is very variable and depends, in part, on the site in which the disease is localized. The diagnosis of endometriosis is carried out through video laparoscopy, where diagnostic methods considered non-invasive are fundamental for deciding how and when to carry out the laparoscopy [18, 19].

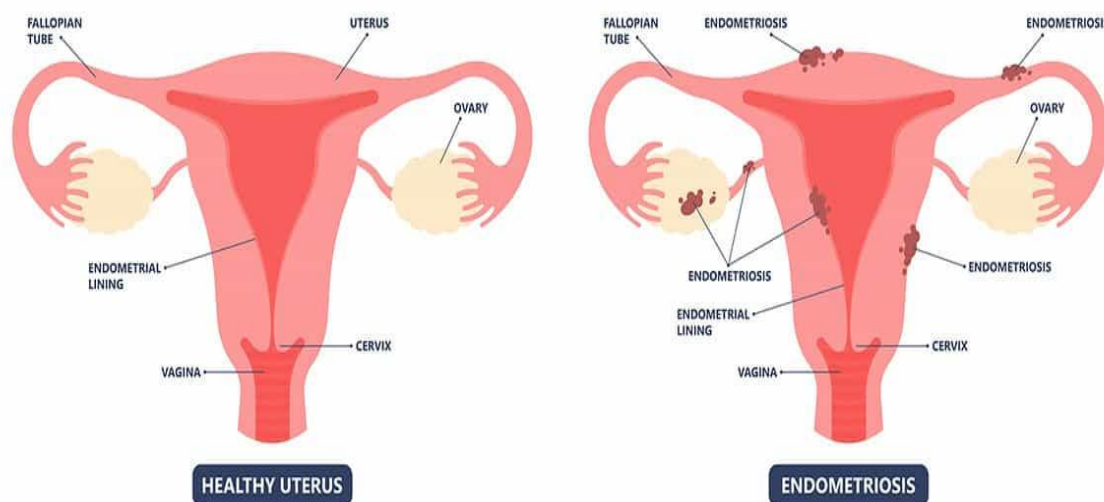


Image 1. Comparative animation: normal tissue and tissue with endometriosis.

Among the most common symptoms of Endometriosis, Varella mentions some, which are pain during sexual intercourse; intestinal and urinary pain and bleeding during menstruation; diarrhea; cold, swelling; difficulty getting pregnant, where infertility is present in approximately 40% of women affected by endometriosis. The pain of endometriosis is characterized by menstrual cramps that are much stronger than usual, causing significant discomfort. The different types of endometriosis consist of tissue localization, where the main types of this gynecological disease are Intestinal endometriosis, Superficial endometriosis, Deep endometriosis, Endometriosis in the ovary, Parietal endometriosis and pulmonary endometriosis. For Marot et al., the classification of endometriosis according to the American Fertility Society, as shown in Table 1 below: [20, 21].

Table 1 – Classification of endometriosis by the AFS (American Fertility Society).

Stage I or Minimal Disease	Where the presence of peritoneal stains is noted.
Stage II or Mild	When extensive peritoneal stains and adhesions are observed.
Stage III or Moderate	When deep endometriomas form,
Stage IV or Severe	There is a significant involvement of the ovarian tube with obstruction of the fundus of the rectouterine pouch, which is the pouch of Douglas.

It is known that endometriosis affects important areas of life, such as the social, physical, and psychological aspects of patients, causing damage to the quality of life at a professional, marital, and sexual level. Due to the different factors involved, such as frequent pain, infertility, reduction of tasks, and the social and economic impact, it is associated with significant physical and emotional morbidity in women living with this pathology [22, 23].

4. ACUPUNCTURE:

As a component of Traditional Chinese Medicine, acupuncture is an age-old method of treatment that has been used for more than 2,000 years to diagnose, cure, and prevent disease. Using needles at specific body locations is known as meridians, which are energy pathways that are thought to support or preserve all biological processes. Using needles inserted into particular energy meridians, acupuncture techniques stimulate the muscle's nerve endings that travel to the central nervous system [24].

There, it is detected and transformed into three levels: the hypothalamic level, which confirms the activation of the

hypothalamic-pituitary axis, which releases β -endorphins (analgesics), cortisol (anti-inflammatory), and serotonin (antidepressant) in the bloodstream and spinal cerebral fluid. While the interneurons of the substantia gelatinosa are going to activate and release dynorphins at the spinal cord level, the gray matter neurons in the midbrain will fire and release endorphins, which will increase the synthesis of serotonin and norepinephrine [25, 26].



Image 2 – Endometriosis and Acupuncture.

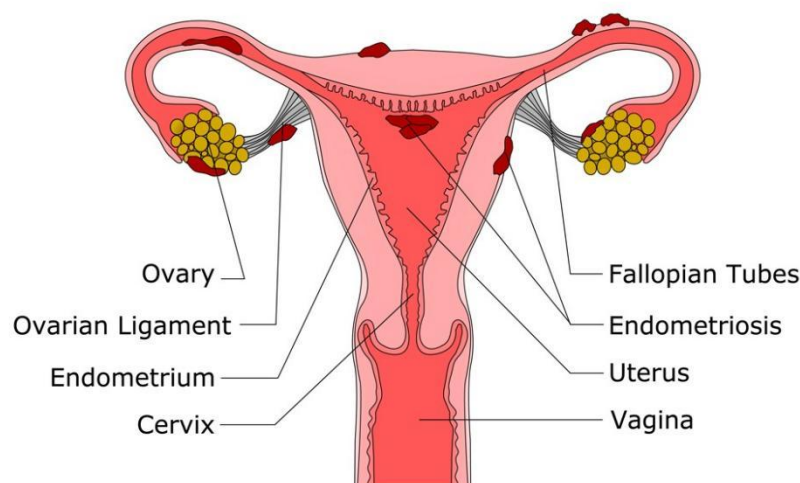


Image 3 - Acupuncture and endometriosis.

Therefore, when the needle enters the skin, it causes microinflammation, activating these substances' natural production. Through releasing these neurotransmitters, the propagation of painful stimuli is blocked, preventing their perception by the brain, which triggers analgesia. However, the body's response is faster, reducing and making the symptoms disappear. According to Silva, acupuncture can be considered an alternative method and a technique that can be used alone in various types of treatment or in combination with Western medicine without using drugs [27, 28].

Acupuncture helps treat endometriosis, as it may relieve pain symptoms more effectively than many medications. In several cases, endometriosis can also be characterized by infertility and adhesion processes, noting that in these cases, acupuncture offers pleasant results to the patient. It is essential to underline that acupuncture improves emotional conditions such as stress, irritability, and depression. The stimuli caused by the needles at the acupuncture points, called acupoints, activate the fibers that have connections in the skin and act directly on the organs, with an immediate effect. The purpose of applying acupuncture is to return the patient to a normal state, that is, before the disease [29, 30].

Acupuncture has several benefits; in the case of endometriosis, it gives relief from pain because by stimulating the nerves located in the muscles and other tissues, acupuncture releases endorphins; it also improves the immune and endocrine system, promotes warming of the uterus, helps with the ovulation process and increases fertility as well as strengthening

and balancing overall health. According to Wen, locating an acupuncture point requires sensitivity. Acupuncture points are found in bony depressions in muscles or joints and are usually sensitive to digital pressure, especially when there is an illness or symptom with which the acupuncture point is associated [31, 32].

Acupuncture not only treats the compromised area of the body but also acts on the entire nervous system, thus stimulating the compensation and balance mechanism throughout the body.

Acupuncture, although an alternative method, should also be considered since its goal is to provide analgesia and minimize side effects caused by medications without using other types of medications [33].

5. THE PERFORMANCES OF PHYSIOTHERAPY IN THE PRACTICE OF ACUPUNCTURE AND THE TREATMENT OF ENDOMETRIOSIS:

Physiotherapy practitioners were given autonomy to practice acupuncture; this practice has given patients a better quality of life and beneficial and effective health outcomes. Acupuncture aims to recover the organism by inducing regenerative processes, normalizing altered functions, strengthening the immune system, and controlling pain. As for the treatment of endometriosis, it can be surgical or pharmacological, but acupuncture is a natural method that can help relieve the symptoms of endometriosis and the side effects of the drugs used during treatment. Acupuncture neurochemically modulates painful impulses in the spinal cord and brain. It influences brain activity through stimulation at more significant points, such as E36, which activates the hypothalamus (responsible for increasing endorphin levels, controlling behavior, temperature, and desire to eat and drink) [34-36].

The nucleus accumbens (regulation of emotions, motivation, cognition, and release of the neurotransmitter dopamine linked to the search for pleasure). It deactivates the hippocampus (responsible for controlling our emotional and behavioral activities and motivational impulses), including the influence on the consumption of analgesics and anesthetics. The action of acupuncture procedures can be seen as an excellent alternative for the treatment of diseases related to the female reproductive system, such as endometriosis, since it is a method capable of producing analgesic, anti-inflammatory, and hormonal regulating effects in the body, such as estrogen and progesterone, as well as not producing side effects, which is considered practically impossible for Western medicine [37, 38].

Acupuncture regarding endometriosis aims to regulate symptoms, relieving pain that medications fail to resolve, improving emotional conditions, stress, irritability, and depression, as well as helping with adhesions and infertility, obtaining very significant results[4]. In standard acupuncture protocols, approximately eight sessions are performed once a week, which can be alternated with pelvic physiotherapy, which is another excellent ally in treating endometriosis. Usually, the physiotherapist's focus on treatment is to relieve painful symptoms; however, in cases where the cause is musculoskeletal, correcting the underlying problem will generate an improvement, if not a cure, for the patient [39, 40].

The practice of acupuncture by the physiotherapist, which established that "the Physiotherapist can also apply the principles, methods, and techniques of acupuncture," observing the presentation of the Crefito, diploma, title, and certificate of completion prepared by an acupuncture body with scientific reputation or by a university, and "Crefito will issue a supporting document that enables the physiotherapist to apply acupuncture methods and techniques in his professional activity," and must be ascertained the need for periodic demonstration observed scientific updates of knowledge about acupuncture. Therefore, the physiotherapist can use resources to bring back the quality of life in health and life of endometriosis patients, such as the use of acupuncture, as a safe technique combined with treatment since it consists of a method that uses needles that are positioned in specific points of the body [41-43].

6. FINAL CONSIDERATIONS:

The respective work sought to significantly contribute to knowledge on the role of physiotherapy regarding the application of acupuncture methods and techniques for treating endometriosis. Therefore, the studies conducted here have briefly highlighted that endometriosis affects women's lives in different ways, the most frequent disorders being the cause of abdominal pain, menstrual cramps, intense premenstrual syndrome, infertility, and changes in bowel habits, among others; health problems.

However, it can be observed that opting for Acupuncture techniques performed by a Physiotherapist can significantly help alleviate the symptoms caused by endometriosis and the side effects of the drugs used during the treatment. Therefore, it is believed that acupuncture as a natural method, when applied to specific points on a woman's body, can improve the inflammatory reaction at the site of endometriosis episodes and provide relief from pain and discomfort. It is believed that this study is a tool to integrate with the limited literature that addresses all topics relating to physiotherapy for women's health, suitable for the treatment of endometriosis, and therefore using acupuncture techniques.

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