



Management of Endometriosis: Symptoms, Treatments, Self-Care Practices, and the Role of Nurses

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Abstract: Endometriosis is a benign chronic disease characterized by the ectopic implantation and growth of endometrial tissue, which is normally confined to the uterine cavity. This disease frequently causes pain symptoms such as dysmenorrhea, pelvic pain, dyspareunia, dysuria, dyskinesia and infertility and negatively affects the quality of life of women. In this context, pharmacologic and/or surgical treatment is applied as medical intervention in order to reduce the symptoms of endometriosis and improve quality of life. Due to the non-curative nature of medical treatments and the risk of recurrence following surgical interventions, current treatment options do not offer a complete cure for endometriosis. Therefore, women may adopt self-care practices in addition to standard treatments as part of endometriosis management. When these practices are carried out under the control of healthcare team, they can contribute positively to the management of the disease. One of the key members of the healthcare team is the endometriosis nurse, who plays a prominent role through responsibilities in caregiving, education, counseling, communication, and coordination. In this review, symptoms, treatment, self-care practices and the role of the nurse in endometriosis were discussed.

Keywords: Endometriosis, Nurses, Self-Care, Treatment

1. Introduction

Endometriosis is a benign chronic disease characterized by the ectopic implantation and growth of endometrial tissue, which is normally confined to the uterine cavity (1,2). It is estimated that approximately 10% (190 million) of women of reproductive age worldwide are affected by endometriosis (1,3). In an epidemiologic study conducted in Turkey, 18.3% of women were reported to have endometriosis (4). The etiology of endometriosis, which is quite common, is still unknown. Some studies have reported an increased risk of endometriosis in women with a history of endometriosis in a first-degree relative, prolonged exposure to endogenous estrogen, short menstrual cycles (<27 days), a history of infertility and risky lifestyle behaviors (such as unhealthy diet and lack of regular exercise) (5-9).

Endometriosis, a multifactorial disease, frequently leads to symptoms such as pain (dysmenorrhea, pelvic pain, dyspareunia, dysuria, dyschezia) and infertility, thereby negatively impacting women's quality of life. (10). In this context, medical interventions including pharmacological (analgesic and hormonal therapy) and/or surgical treatments are employed to alleviate endometriosis symptoms and improve quality of life (1). However, despite these treatments, many women continue to experience pain. Moreover, pharmacological therapies may cause side effects, leading 10-40% of women to discontinue treatment. Surgical interventions, on the other hand, carry the risk of complications and disease recurrence following the procedure. Due to these factors, women often turn to self-care practices in addition to treatments to manage their symptoms (11,12).

In this review, symptoms, treatment, self-care practices and the role of the nurse in endometriosis were discussed.

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2. Symptoms

Endometriosis is often associated with pain symptoms (dysmenorrhea, pelvic pain, dyspareunia, dysuria, dyskinesia) and infertility (1,13). In addition to pain and infertility, gastrointestinal symptoms such as nausea, hypoglycemia, diarrhea, constipation, hematochezia and hematuria; menstrual symptoms such as menorrhagia and metrorrhagia; and psychosomatic symptoms such as dizziness, fatigue, stress, depression and anxiety may be observed depending on the location of endometriosis foci. These symptoms may occur alone or in combination with other symptoms. An increase in the number of symptoms is associated with an increased likelihood of endometriosis. However, endometriosis can also be asymptomatic in some cases (1,6,8,9,13,14).

3. Treatment

There is no definitive treatment for endometriosis. However, treatment methods including pharmacological, surgical or a combination of both are applied to reduce pain, preserve fertility and improve quality of life (1,8).

3.1. Pharmacological treatment

3.1.1. Analgesics

The National Institute for Health and Care Excellence recommends paracetamol or non-steroidal anti-inflammatory drugs (NSAIDs), alone or in combination, as first-line treatment for endometriosis-related pain. However, continuous intake of NSAIDs throughout the menstrual cycle may prevent ovulation (13,15). Therefore, it is recommended that NSAIDs should not be used in women who have difficulty conceiving or are infertile (16).

3.1.2. Hormonal treatment

Hormonal treatment may include combined hormonal contraceptives (CHC), progestogens, Gonadotropin-Releasing Hormone (GnRH) analogs and aromatase inhibitors. Among these methods, CHC inhibits ovulation by suppressing gonadotropin hormones (Follicle Stimulating Hormone (FSH) and Luteinizing Hormone (LH)). It also creates a hypoestrogenic environment, causing initial decidualization and subsequent atrophy of endometrial tissue (8,13). HRC is available in combined oral contraceptive (COC), patch and vaginal ring forms. International guidelines recommend the use of COC in the first line of hormonal therapy (16).

Progestogens are another commonly used hormonal treatment modality for endometriosis, following the use of CHC, and have apoptotic, antiangiogenic and immunomodulatory effects in addition to the effects of CHC. Progestogens are available in oral contraceptive, levonorgestrel-releasing intrauterine device and implant forms. Side effects such as irregular uterine bleeding/staining, amenorrhea, weight gain, and mood changes may be observed with the use of these progestogen forms (8,13,16).

GnRH analogs can be used instead of these treatment modalities in cases where the use of the CHC and progestin therapy is not effective. GnRH analogs are divided into two groups: agonists and antagonists. GnRH agonists initially bind to the GnRH receptors in the pituitary gland and induce a response that increases gonadotropins, but then desensitize the pituitary to stimulation by causing the receptors to decrease. Thus, it creates a hypogonadotropic-hypogonadal state (medical hypophysectomy and oophorectomy). GnRH agonists can be administered intramuscularly, subcutaneously or intranasally. Side effects associated with the use of GnRH agonists include hot flushes, vaginal dryness, decreased libido, mood swings, headaches and decreased bone density. GnRH antagonists suppress gonadotropin hormones and consequently sex steroids. GnRH antagonists are administered orally or intramuscularly (8). Side effects such as vaginal atrophy and bone loss can be seen with the use of GnRH antagonists (8,13,16).

Aromatase inhibitors suppress estrogen synthesis both in the periphery (brain, adipose tissue) and in endometriotic foci. Aromatase inhibitors have side effects such as vaginal dryness, hot flushes and decreased bone mineral density. Therefore, they are recommended when other pharmacologic treatment methods and surgical treatment are not effective (8,13,16).

3.2. Surgical treatment

The main goal of surgical treatment is to excise all visible endometriotic foci and to prevent or delay recurrences. This treatment is preferred in cases where malignancy is suspected, intestinal and urinary tract obstruction is present, pharmacologic treatment is ineffective, contraindicated or refused by the patient. Surgical treatment is divided into conservative and radical. Conservative surgery involves excision or ablation of endometriotic foci to preserve the uterus and ovarian tissue. This treatment is the first choice in the surgical treatment of endometriosis because it preserves fertility, is less invasive than radical surgery and carries a lower risk of morbidity. However, in addition to the standard surgical risks, there are complications, especially the risk of bowel and bladder injury, decreased ovarian reserve (e.g. after endometrioma excision) and postoperative adhesion formation (17).

Radical surgery includes hysterectomy with or without oophorectomy. This method is preferred in women who have no desire to have children and have not responded to previous medical or conservative surgical treatments. However, it has complications such as permanent loss of fertility and increased symptoms related to surgical menopause (17).

4. Self-Care Practices

Self-care is the ability of individuals, families, and communities to promote and maintain health, prevent disease, and cope with illness, with or without the support of healthcare professionals (18). Self-care in endometriosis is the practices women engage in on their own to manage disease symptoms and treatment-induced complications (19,20). When these practices are carried out under the control of health professionals, they can contribute positively to the management of the disease (19). Farshi et al. study, it was reported that self-care counseling decreased anxiety levels and improved the quality of life of women with endometriosis (21). In Joseph and Mills' study, it was determined that the multidisciplinary pain self-management program applied to women living with endometriosis-related/non-associated pelvic pain increased women's pain self-management skills and quality of life. (22). Šakinytė and Šakalytė's study found that self-care, when properly directed, was effective in reducing endometriosis symptoms and complications caused by the disease (19). In line with the existing studies, it is seen that self-care is very important in the management of endometriosis. In this context, the following self-care practices can be recommended by evaluating women with endometriosis under the control of health professionals (19,21,23-28).

Some suggestions for self-care practices;

- Regular monitoring of symptoms,
- Seek specialist support in case of increased symptoms or infertility,
- Regular use of prescribed medicines,
- Regular health check-ups,
- Eating a healthy diet, especially adopting an anti-inflammatory diet, including:
 - Consumption of fibrous foods,
 - Preference for red fruits and green leafy vegetables,
 - Consuming foods containing omega-3,
 - Limit sugar and refined carbohydrates,

- Reduction of products containing caffeine,
 - Restricting consumption of processed and red meat,
 - Reducing or stopping alcohol consumption,
 - Avoiding prepared and packaged foods,
 - Prefer vegetable oils (olive oil),
- Regular low to moderate intensity exercise (walking, swimming, yoga),
 - Applying methods of coping with stress (such as meditation, deep breathing exercises, spiritual support),
 - Seek social or professional support where necessary,
 - Rest and warm application in cases of pain,
 - Requesting support when daily tasks are difficult,
 - Sleep 7-9 hours a day,
 - Maintaining participation in social activities.

5. The Role of the Nurse

Multidisciplinary care is recommended in addition to standard treatment in the management of endometriosis (29). Multidisciplinary care is a team approach that brings together the competencies of specialists from different disciplines to provide long-term, comprehensive and patient-centered care for endometriosis patients (30). One of the key members of the team is the endometriosis nurse (31). Endometriosis nurses come to the forefront with their caregiving, education, counseling, communication and coordinator roles (32,33). In the role of the caregiver, they should take the patient's anamnesis, perform a physical examination, guide symptom management, pain control, follow-up of medication and development of self-care strategies. They should also conduct regular follow-up interviews with the patient to monitor the course of the disease and response to treatment (33,34). In the role of the educator, they should educate health professionals, women and their partners about endometriosis and develop materials to be used in trainings (33,35). In the role of the counseling, they should provide counseling for pain, infertility, diagnosis and treatment process, menopause, sexuality and psychological problems or refer them to relevant specialists (33,34). In the role of the communication and coordinator, they should ensure that care is carried out in a holistic manner by communicating effectively with other members of the multidisciplinary team such as gynecologists, general practitioners, algologists, physiotherapists and psychologists. In addition, they should contribute to the monitoring and continuity of service quality by taking an active role in the planning, implementation and evaluation of care. They should also coordinate organizational processes such as managing databases, arranging outpatient appointments and planning surgical interventions (31,33). With these roles, nurses can raise awareness about endometriosis, reduce symptoms, improve self-care behaviors and quality of life (36-39).

6. Conclusion

Endometriosis frequently leads to symptoms such as pain and infertility, adversely affecting women's quality of life. Pharmacological and surgical treatments are employed to manage these symptoms and enhance quality of life. In addition to treatments, many women also adopt self-care practices. When performed under the supervision of nurses and other healthcare professionals, self-care practices can be effective in reducing pain, anxiety, and disease-related complications, as well as in improving quality of life. However, the existing literature on this topic is limited, and further high-quality research is needed to strengthen the evidence base.

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