

Clinical Analysis and Nursing Points of Gynecological Endocrine Disorders

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Abstracts: *Objective:* To explore the clinical manifestations and nursing points for gynecological endocrine disorders. *Methods:* A total of 120 patients with gynecological endocrine disorders admitted to the Affiliated Hospital of Hebei University from January 2019 to January 2021 were selected as research subjects. The patients were divided into two groups: 60 in the control group and 60 in the research group, using a randomized numerical table. The control group received conventional nursing methods, while the research group received personalized nursing methods. The changes in clinical symptoms and quality of life scores of the patients before and after treatment were observed and analyzed. *Results:* The clinical symptom evaluation scores in the research group were significantly lower than those in the control group ($P < 0.05$). Additionally, the quality of life scores in the research group were significantly higher than those in the control group ($P < 0.05$). *Conclusion:* Gynecological endocrine disorders exert a considerable impact on women's health. Healthcare professionals should conduct a comprehensive assessment of clinical manifestations, pathological diagnosis, and etiological analysis during the treatment process. Formulating personalized care plans is essential for addressing the unique needs of patients with gynecological endocrine disorders.

Keywords: Gynecological endocrine disorders; Clinical presentation; Diagnosis; Nursing intervention

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1. Introduction

Gynecological endocrine disorders stand out as prevalent conditions among women, characterized by a range of clinical manifestations, including irregular menstruation, infertility, and dysmenorrhea. The onset of this disease is intricately linked to hormonal imbalances, influenced by factors such as the environment, genetics, and lifestyle habits^[1-6]. In recent years, the swift pace of life, heightened stress levels, and the adoption of unhealthy lifestyle habits have contributed to a noticeable annual increase in the incidence of gynecological endocrine disorders^[7-11]. This paper aims to delve into the clinical manifestations and nursing points associated with gynecological endocrine disorders, offering valuable insights for clinical reference.

2. Materials and methods

2.1. General information

A total of 120 patients with gynecological endocrine disorders, aged between 18 and 55 years old, were selected as study subjects from those admitted to the Affiliated Hospital of Hebei University between January 2019 and January 2021. All patients exhibited varying degrees of symptoms such as menstrual irregularities, dysmenorrhea, and infertility. Exclusion criteria included severe cardiac, liver, and renal insufficiency, as well as blood system diseases.

2.2. Methods

2.2.1. Hormone level detection

Venous blood was drawn from the patients on the 3rd day of their menstrual cycle, and hormone levels, including estrogen, progesterone, testosterone, and others, were tested.

2.2.2. Pathological diagnosis

Some patients underwent pathological examination to elucidate the etiology of their endocrine disorders.

2.2.3. Nursing methods

The control group received conventional nursing methods, while the research group received personalized nursing methods as follows:

- (1) **Dietary adjustments:** Diet plays a foundational role in treating gynecological endocrine disorders. Patients are advised to maintain a well-balanced diet rich in vitamins, minerals, and antioxidants. This includes the incorporation of fresh vegetables, fruits, whole grains, and healthy fats. To minimize the risk of inflammatory response and endocrine disruption, it is crucial to avoid excessive consumption of processed foods, sugar, and saturated fats. Additionally, ensuring an adequate water intake is vital for sustaining normal metabolic function.
- (2) **Exercise and rest:** Appropriate exercise and sufficient rest are pivotal elements in treating gynecological endocrine disorders. Patients are encouraged to engage in suitable exercises such as yoga, jogging, or swimming based on personal preferences and physical conditions, aiming for at least 150 minutes of moderate-intensity aerobic exercise weekly. However, caution is advised against excessive exercise leading to physical fatigue and endocrine disruption. Simultaneously, maintaining sufficient rest and sleep is essential for optimal endocrine regulation. Establishing a regular work schedule and avoiding detrimental habits, such as staying up late or disrupting the natural sleep-wake cycle, aids the body in recovery and maintaining endocrine balance.
- (3) **Psychological guidance:** In the treatment of gynecological endocrine disorders, psychological guidance is indispensable. Negative emotions such as anxiety and depression may exacerbate endocrine disorders, emphasizing the need for patients to acquire effective coping strategies. Techniques such as relaxation exercises and cognitive restructuring can help alleviate psychological pressure.
- (4) **Symptom monitoring:** Close monitoring of condition changes is pivotal in treating gynecological endocrine disorders. Patients should regularly track symptoms, including menstrual cycle, flow, and cramps, to promptly detect abnormal manifestations resulting from endocrine disorders. If symptoms worsen or persist, timely consultation with a doctor is advised for potential adjustments to the treatment plan.

- (5) Medication: Medication constitutes a primary treatment avenue for gynecological endocrine disorders. Patients should choose suitable medications – such as hormone therapy, traditional Chinese medicine (TCM), or acupuncture – based on individual conditions and under professional guidance. Adherence to the prescribed regimen, vigilance toward medication side effects and contraindications, and refraining from arbitrary changes to dosage are imperative.
- (6) Regular checkups: Regular checkups are indispensable for gynecological endocrine disorders treatment. Following the doctor’s recommendations, patients should undergo routine endocrine checkups, including hormone level and thyroid function tests, to assess condition changes and treatment effectiveness. Simultaneously, routine gynecological examinations – such as cervical smears and breast examinations – are conducted to rule out other potential gynecological diseases. Effective communication with doctors about examination methods and report interpretation enhances patient understanding of normal ranges and the significance of each index, facilitating informed decision-making about treatment plans.
- (7) Health education: Health education plays a crucial role in aiding patients with gynecological endocrine disorders to comprehend their condition and establish a healthy lifestyle. Active participation in educational activities is encouraged, offering insights into gynecologic endocrinology basics, healthy eating habits, and the significance of exercise and rest. Cultivating positive lifestyle habits – quitting smoking, limiting alcohol intake, and avoiding overwork – helps mitigate the risk of endocrine disorders.

2.3. Observation indicators

The alterations in clinical symptoms and quality of life scores of patients both before and after treatment were documented.

2.4. Statistical analysis

Data analysis was conducted using SPSS 18.0 statistical software. Measurement data were presented as mean \pm standard deviation (SD), with the *t*-test employed. Count data were expressed as %, utilizing the χ^2 test. A significance level of $P < 0.05$ was considered indicative of statistical significance.

3. Results

The clinical symptom evaluation scores for patients in the research group were markedly lower than those in the control group ($P < 0.05$), and the quality of life scores in the research group significantly exceeded those in the control group ($P < 0.05$), as illustrated in **Table 1**.

Table 1. Comparison of clinical symptoms between the two groups

Group	Number of cases	Clinical symptoms		Quality of life	
		Before treatment	After treatment	Before treatment	After treatment
Control group	60	30.98 \pm 1.26	56.98 \pm 4.23	31.48 \pm 1.44	41.98 \pm 1.26
Research group	60	31.69 \pm 1.74	41.36 \pm 4.01	30.69 \pm 1.65	50.69 \pm 1.74
<i>t</i>		4.34	20.05	5.34	30.34
<i>P</i>		0.86	0.00	0.88	0.00

4. Discussion

The discussion on the clinical analysis of gynecological endocrine disorders encompasses various aspects. Hormone level detection is highlighted as a crucial diagnostic tool, revealing frequent abnormalities in estrogen, progesterone, testosterone, and other hormones among patients^[12]. Pathological diagnosis contributes valuable insights, linking disorders to factors such as polycystic ovary syndrome and premature ovarian failure^[13]. The broader analysis of etiology recognizes environmental influences, genetic predispositions, and lifestyle habits as contributors to gynecological endocrine disorders, with prolonged high stress, poor dietary choices, and insufficient physical activity, identified as potential inducers. Symptom assessment provides a clinical lens, outlining manifestations such as irregular menstruation, dysmenorrhea, infertility, rough skin, and mood swings^[14], with severity and duration serving as key criteria for evaluating the degree of endocrine disorders.

Gynecological endocrine disorders, a prevalent gynecological issue, significantly impact patients' quality of life and overall health. Key nursing points emphasize the importance of maintaining a healthy lifestyle, including dietary habits, regular rest, moderate exercise, avoiding substance abuse, undergoing regular medical checkups, and seeking prompt medical assistance for severe symptoms^[15-17].

- (1) **Dietary habits:** A pivotal aspect of preventing and treating gynecological endocrine disorders involves maintaining a healthy diet. Patients should steer clear of excessive consumption of high-calorie, high-fat, and high-sugar foods to mitigate the risk of obesity and endocrine disorders. Simultaneously, increasing the intake of vegetables, fruits, whole grains, and healthy proteins is advised to provide essential nutrients and vitamins.
- (2) **Regular rest:** Establishing a regular routine is equally crucial for treating gynecological endocrine disorders. Patients should adhere to a consistent work schedule, ensure adequate sleep and rest, and avoid detrimental habits such as staying up late and disrupting the natural sleep-wake cycle. This contributes to the adjustment of the body's metabolism and hormone levels, promoting overall improvement.
- (3) **Moderate exercise:** Incorporating moderate exercise into the routine aids in improving physical fitness and enhancing immunity. Patients can choose suitable exercise methods, such as walking, yoga, or swimming, and engage in at least 150 minutes of moderate-intensity aerobic exercise each week. Caution is advised against excessive exercise leading to physical fatigue and endocrine disruption.
- (4) **Avoiding substance abuse:** Drug abuse poses a risk of endocrine disruption and other health issues. Patients should use medications as directed by their doctors, avoiding the misuse of health and beauty products. Prior to any medication use, consultation with doctors is essential, strictly adhering to their guidance.
- (5) **Undergoing regular medical checkups:** Regular physical examinations play a crucial role in the timely detection of abnormalities among patients with gynecological endocrine disorders. Undergoing routine endocrine examinations, including hormone level and thyroid function tests, along with gynecological examinations such as cervical smear tests and breast examinations, helps in understanding changes in the condition and treatment effectiveness, facilitating timely adjustments to the treatment plan.
- (6) **Seeking prompt medical assistance for severe symptoms:** Patients facing severe symptoms, such as irregular menstruation, severe dysmenorrhea, and infertility, should promptly seek medical assistance. Under the guidance of a healthcare professional, appropriate treatment measures should be taken to prevent the deterioration of the condition or resorting to self-medication. Complying with the doctor's instructions, adhering to the prescribed medication, monitoring the body's response, and promptly informing the doctor of any adverse reactions are crucial aspects of effective treatment.

The clinical symptom evaluation score of patients in the research group was 56.98 ± 4.23 , significantly lower than that of the control group, which was 41.36 ± 4.01 ($P < 0.05$). Additionally, the quality of life score for the research group was 50.69 ± 1.74 , significantly higher than that of the control group, which was 41.98 ± 1.26 ($P < 0.05$). These findings underscore the substantial value of personalized nursing in supplying vital information for developing subsequent personalized care programs, aiding in the precise diagnosis and understanding of the condition's extent. The ensuing personalized nursing program serves as a critical foundation. Psychological guidance proves pivotal in helping patients manage their mindset, alleviate psychological stress, and boost confidence in their treatment. Nursing staff must be attentive to patients' psychological well-being, listen to their needs, encourage a positive approach to their condition, and disseminate relevant knowledge and successful treatment cases to bolster their confidence. Offering detailed information on medications, including their role, usage methods, side effects, and precautions, ensures patients use them correctly. Patients are encouraged to consume more fresh vegetables and fruits, along with whole grains and healthy proteins, avoiding excessive intake of high-calorie, high-fat, and high-sugar foods. Tailoring exercise programs to individual physical conditions and fitness levels, such as walking, yoga, or swimming, and avoiding excessive exercise leading to physical fatigue is imperative. Regular reviews serve as a timely means to detect complications or adverse reactions, allowing for prompt intervention. Attention to breast health is emphasized, guiding patients to undergo regular breast examinations for timely detection and management of any issues. Establishing a strong and trusting communication relationship between nursing staff and patients is crucial to assisting patients in coping with the challenges posed by gynecological endocrine disorders.

In summary, personalized care plays a pivotal role in the realm of gynecological endocrine disorders, particularly in diagnosis clarification, psychological guidance, drug treatment, dietary adjustment, exercise guidance, regular reviews, reproductive health, and overall care. Integrating these measures comprehensively and effectively offers substantial nursing support, promoting the improvement and recovery of the condition. Recognizing the profound impact of gynecological endocrine disorders on women's health, healthcare professionals must conduct thorough assessments of clinical manifestations, pathological diagnosis, and etiological analyses during the treatment process, formulating personalized care plans accordingly. Nevertheless, the existing research on gynecological endocrine disorders remains insufficient, particularly in understanding the complexity and diversity of etiology and the lack of standardized treatment methods. Further exploration and research are warranted to address these gaps.

Disclosure statement

The authors declare no conflict of interest.

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