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Review

Endometriosis and Its Clinical Treatment in Current Times: A Brief Updated Review

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ABSTRACT

Endometriosis is a chronic gynecological condition that affects approximately 10% of women of reproductive age, characterized by the presence of endometrial tissue outside the uterus, mainly affecting women in this age group. This article addresses advances in the clinical treatment of endometriosis, emphasizing pharmacological and hormonal approaches available in recent years. The review explores the effectiveness of GnRH analogs, progestins, nonsteroidal anti-inflammatory drugs (NSAIDs), and emerging therapies such as selective progesterone receptor modulators. It is concluded that personalized treatment, based on factors such as age, symptom severity, and fertility desire, is essential for effective management.

Keywords: Endometriosis; Reproductive age; Fertility; Hormonal therapy

Introduction

Endometriosis is a multifactorial condition that affects approximately 10% of women of reproductive age. It is characterized by the presence of endometrial-like tissue outside the uterine cavity, frequently affecting pelvic organs such as the ovaries, fallopian tubes, peritoneum, and occasionally extraperitoneal regions. Clinical manifestations range from asymptomatic cases to chronic pelvic pain, severe dysmenorrhea, dyspareunia, and infertility. The pathogenesis of endometriosis remains poorly understood, although various theories, such as retrograde menstruation, coelomic metaplasia, and immune alterations, are widely discussed. Studies also suggest a strong genetic and hormonal association. Despite the absence of a definitive cure, significant advances in clinical treatment have substantially improved patients' quality of life.

Current clinical treatments aim to control symptoms, reduce disease progression, and preserve fertility. The therapeutic approach includes the use of GnRH analogs, which induce a hypoestrogenic state, as well as progestins, which promote the atrophy of ectopic tissue. Alternatives such as NSAIDs for pain control and new pharmacological options, such as selective progesterone receptor modulators, expand the range of treatment possibilities. In this context, scientific advancements have enabled a better understanding of the disease's

pathophysiological mechanisms, resulting in personalized and innovative treatments.

Objectives

This article aims to evaluate advances in the clinical treatments of endometriosis, emphasizing the evolution of hormonal therapies, alternative approaches, and their impact on the quality of life of affected women.

Materials and Methods

A bibliographic review was conducted using articles published in the PUBMED, ScienceDirect, and Scielo databases to support the study.

Discussion

Endometriosis remains a significant clinical challenge due to the complexity of its presentation and the diversity of responses to treatments. Among conventional therapies, GnRH analogs remain a cornerstone, reducing estrogen levels and promoting lesion regression. However, associated side effects, such as climacteric symptoms, limit their prolonged use. Progestins, in turn, are widely used due to their low cost and favorable safety profile. Medications such as dienogest and medroxyprogesterone have proven effective in pain relief and lesion reduction, although they may cause changes in menstrual patterns. Recently, selective progesterone receptor modulators, such as elagolix, have shown promising efficacy in managing moderate to severe endometriosis. These agents act selectively, offering a more tolerable side effect profile, expanding therapeutic possibilities. Clinical studies indicate that this class of drugs may gradually replace traditional options in refractory cases.

Furthermore, complementary approaches, such as nutritional interventions and stress management techniques, have shown benefits in some patients, highlighting the importance of a multidisciplinary approach. Despite this, study heterogeneity makes it difficult to standardize protocols. Although significant advances have been made, late diagnosis remains a major obstacle, leading to disease progression and impairment of quality of life. The inclusion of biomarkers for early diagnosis and the incorporation of personalized therapies can improve prognosis and reduce the disease's impact.

Conclusion

Endometriosis remains a significant clinical challenge, requiring multidimensional approaches for effective management. Recent advances in hormonal and alternative therapies offer new hope for patients, especially those who do not respond to conventional treatments. However, the lack of a definitive cure underscores the need for further research focused on less invasive and more effective treatments. An integrated approach combining pharmacological therapies, psychological support, and complementary interventions may be the most promising path. Additionally, investing in awareness campaigns is essential to reduce diagnostic delays and promote access to appropriate treatments. By prioritizing individualized and integrated care, it is expected to significantly improve the quality of life of women affected by endometriosis.

References

1. Agarwal SK, et al. Endometriosis and infertility. Fertility and Sterility 2021;116(5):1151-1160.
2. Becker CM, et al. Anti-TNF therapy in the treatment of endometriosis: A review of the evidence. Human Reproduction Update 2010;16(4):539-545.
3. Becker CM, et al. new approaches to treatment of endometriosis. Best Practice Research Clinical Obstetrics Gynaecology 2021;71(1):72-82.
4. Bulun SE. Endometriosis. The New England J Med 2019;380(1):1244-1256.
5. Chapron C, Dubuisson JB. Diagnosing deep endometriosis. Human Reproduction 2019;34(2):236-249.
6. Eskenazi B, Warner ML. Epidemiology of endometriosis. Obstetrics Gynecology Clinics of North America 2021;48(4):585-599.
7. Giudice LC. Clinical practice. Endometriosis. The New England J Med 2018;362(25):2389-2398.
8. Greene AD, et al. Endometriosis and mental health. Obstetrical Gynecological Survey 2017;72(9):563-581.
9. Horne AW, Saunders PTK. Prospects for future therapies in endometriosis. Women's Health (London) 20106(5):715-729.
10. Koninckx PR, Ussia A, Martin DC, et al. Pathogenesis of endometriosis: The genetic/epigenetic theory. Fertility and Sterility 2019;111(2):327-340.
11. Leonardi M, et al. Effectiveness of hormonal treatments for endometriosis-associated pain. J Minimally Invasive Gynecology 2020;27(1):145-154.
12. McKinnon BD, et al. Mechanisms of pain in endometriosis. Climacteric 2020;23(6):473-478.
13. Morotti M, et al. Quality of life in endometriosis patients. J Psychosomatic Obstetrics Gynecology 2017;38(3):201-209.
14. Olovsson M. Surgical and medical management of endometriosis. The Lancet 2022;399(10343):839-849.
15. Parasar P, Ozcan P, Terry KL. Endometriosis: Epidemiology, diagnosis, and clinical management. Current Obstetrics and Gynecology Reports 2017;6(1):34-41.
16. Taylor HS, Osteen KG, Bruner-Tran KL,et al. Novel therapies targeting endometriosis. Nature Reviews Endocrinology 2018;14(3):139-152.
17. Vercellini P, Buggio L, Frattaruolo MP, et al. Medical treatment of endometriosis-related pain. Fertility and Sterility 2017108(6):764-785.
18. Zondervan KT, Becker CM, Missmer SA, et al. Endometriosis. Nature Reviews Disease Primers 2020;6(1):1-25.