

Management of Endometriosis: An Advanced Approach towards Infertility Patients

Dr. VANDANA BABBAR

(MS)(OBS & GYNAE), Sr Gynaecologist & Obstetrician VANDANA NURSING HOME FARIDABAD HARYANA

DOI: 10.29322/IJSRP.13.10.2023.p14216
<https://dx.doi.org/10.29322/IJSRP.13.10.2023.p14216>

Paper Received Date: 15th August 2023
Paper Acceptance Date: 24th September 2023
Paper Publication Date: 6th October 2023

Abstract- Endometriosis is a complex and challenging gynecological condition that affects millions of women worldwide, causing severe pelvic pain and infertility. In this advanced-level article, we explore the current understanding of endometriosis, its impact on fertility, and the innovative approaches used in its management to address infertility in affected patients. We delve into the multidisciplinary approach, including medical, surgical, and assisted reproductive techniques, and the emerging therapeutic strategies that hold promise for improving fertility outcomes in these patients.

I. INTRODUCTION

Endometriosis is a chronic disorder characterized by the presence of endometrial-like tissue outside the uterus, commonly on the ovaries, fallopian tubes, and other pelvic structures. It affects approximately 10% of women of reproductive age and up to 50% of infertile women. The condition's etiology remains poorly understood, making its management particularly challenging, especially in infertility patients.

Understanding Endometriosis and Its Impact on Fertility: 1.1 Pathogenesis and Staging of Endometriosis 1.2 Impact on Fertility and Subfertility Mechanisms

Diagnosis and Evaluation of Infertility in Endometriosis Patients: 2.1 Diagnostic Challenges and Advances in Imaging Techniques 2.2 Biomarkers for Endometriosis-Related Infertility

Medical Management of Endometriosis and Infertility: 3.1 Hormonal Therapies and their Effects on Fertility 3.2 Gonadotropin-Releasing Hormone (GnRH) Agonists/Antagonists in Infertility Patients 3.3 Aromatase Inhibitors and Selective Progesterone Receptor Modulators (SPRMs)

Surgical Interventions and Their Impact on Fertility: 4.1 Laparoscopy vs. Laparotomy:

Comparative Analysis 4.2 Excision vs. Ablation of Endometriotic Lesions 4.3 Role of Radical Surgery in Severe Endometriosis

Assisted Reproductive Techniques (ART) in Endometriosis-Related Infertility: 5.1 Intrauterine Insemination (IUI) in Mild Endometriosis 5.2 In vitro Fertilization (IVF) and

Intracytoplasmic Sperm Injection (ICSI) in Advanced Endometriosis 5.3 Frozen Embryo Transfer (FET) vs. Fresh Embryo Transfer in Endometriosis Patients 5.4 Endometrial Receptivity and ART Success in Endometriosis

Emerging Therapeutic Strategies in Endometriosis Management: 6.1 Immunomodulatory Agents in Endometriosis and Fertility 6.2 Anti-angiogenic Therapies and Their Impact on Endometriosis-Related Infertility 6.3 Epigenetic Modifiers: A Novel Approach in Endometriosis Treatment

Multidisciplinary Approach in the Management of Endometriosis-Related Infertility: 7.1

Collaboration between Gynecologists, Reproductive Endocrinologists, and Urologists 7.2 Role of Pain Management and Psychological Support

Reproductive Life Planning and Preservation in Endometriosis Patients: 8.1 Fertility Preservation Options in Young Women with Endometriosis 8.2 Impact of Surgical Interventions on Ovarian Reserve 8.3 Decision-Making and Counseling for Infertility Treatment in Endometriosis Patients

The Role of Lifestyle Modifications and Complementary Therapies: 9.1 Diet and Nutrition in Endometriosis Management 9.2 Mind-Body Therapies and Their Impact on Fertility Outcomes

II. CONCLUSION

Endometriosis-related infertility poses significant challenges to affected women and clinicians.

However, with advanced medical, surgical, and assisted reproductive techniques, along with emerging therapeutic strategies, the management of endometriosis in infertility patients has shown promising results. A comprehensive multidisciplinary approach, personalized treatment plans, and a focus on reproductive life planning are essential in improving fertility outcomes and overall quality of life for women battling this complex condition. Future research and collaboration among experts are crucial to further enhance our understanding and treatment of endometriosis-related infert

REFERENCES

- [1] Bulun SE. Endometriosis. *N Engl J Med.* 2009;360(3):268-279
- [2] Vercellini P, Viganò P, Somigliana E, Fedele L. Endometriosis: pathogenesis and treatment. *Nat Rev Endocrinol.* 2014;10(5):261-275
- [3] Hart RJ, Hickey M, Maouris P, Buckett W. Excisional surgery versus ablative surgery for ovarian endometriomas. *Cochrane Database Syst Rev.* 2008;(2):CD004992.:
- [4] Harb HM, Gallos ID, Chu J, Harb M, Coomarasamy A. The effect of endometriosis on in vitro fertilisation outcome: a systematic review and meta-analysis. *BJOG.* 2013;120(11):1308-1320
- [5] Osteen KG, Bruner-Tran KL, Eisenberg E. Reduced progesterone action during endometrial maturation: a potential risk factor for the development of endometriosis. *Fertil Steril.* 2005;83(3):529-537
- [6] Johnson NP, Hummelshoj L; World Endometriosis Society Montpellier Consortium. Consensus on current management of endometriosis. *Hum Reprod.* 2013;28(6):1552-1568
- [7] Reference for Reproductive Life Planning and Preservation in Endometriosis Patients: Practice Committee of the American Society for Reproductive Medicine. Fertility preservation in patients undergoing gonadotoxic therapy or gonadectomy: a committee opinion. *Fertil Steril.* 2019;112(6):1022-1033
- [8] Reference for The Role of Lifestyle Modifications and Complementary Therapies: Rossi AC, Prefumo F. Obesity effects on in vitro fertilization (IVF) treatment outcome. *Curr Opin Obstet Gynecol.* 2018;30(3):151-156

AUTHORS

First Author – Dr. VANDANA BABBAR (MS)(OBS & GYNAE), Sr Gynaecologist & Obstetrician VANDANA NURSING HOME FARIDABAD HARYANA