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Case Report

Complete resolution of endometriotic cyst with letrozole and meprate treatment

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ABSTRACT

Pelvic endometriosis is seen in 5% gynecological patients it leads to infertility. Various treatment options are available like oral contraceptives and progestones. Letrozole is an aromatase inhibitor which decreases estrogen level in endometriotic cyst wall. Here, is reported pelvic endometriosis successfully treated with letrozole and meprate.

Keywords: Endometriosis, Letrozole

INTRODUCTION

Pelvic endometriosis is seen in reproductive age group with symptoms of dysmenoria and infertility.

This case is discussed from an obstetrician and gynecological perspective. It has to be differentiated from pelvic inflammatory disease.¹

Laproscopy is a gold standard for diagnosing pelvic entrometriosis.

Pelvic endrometriosis is classified as mild moderate and deep infiltrating endometriosis. It is one of the cause for frozen pelvis.

CASE REPORT

A para 2 patient in her mid-30's presented in the clinic in 2023 May with history of dysmenoria. She had no other significant medical issues. Vitals were normal, blood pressure (BP) was 140/100, pulse was 75/min, respiratory and cardiovascular system (CVS) was normal, lower abdominal tenderness was there and ultra-sonography reveled bilateral ovarian endometriotic cysts of three

centimeters in size.

CA125 was in normal limit and patient was put on letrozole 2.5 mg per day daily and meprate 5 mg daily for 6 months after which she had relief from her symptoms. The treatment stopped after six months and the ultra sound scan of the patient on May 2024 showed normal pelvic scan and no evidence of endometriotic cysts.^{2,3}



Figure 1: Left side endometriosis cyst about 3 cm.

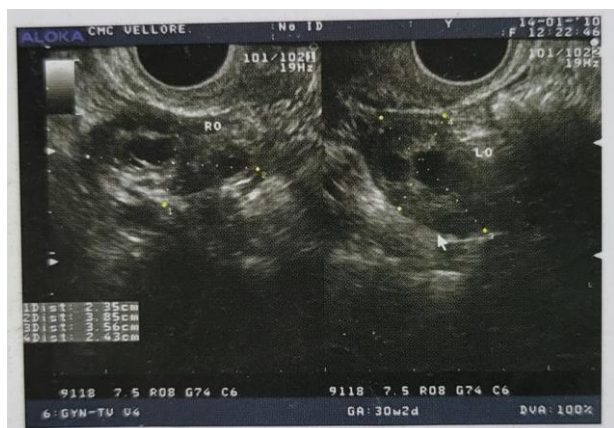


Figure 2: Ultra sonography of the same patient showing normal scan.

DISCUSSION

Pelvic endometriosis is seen in 5% gynecological patients causing dysmenoria and infertility. Letrazole is an aromatase inhibitor aromatase enzyme is found in endometriotic cyst wall hence use of letrazole leads to suppression of estrogen production in cyst wall letrazole plus meprate and calcium and vitamin D is a recent promising treatment of endometriosis as in this case.^{4,5}

Newer treatment modalities for endometriosis are hormonal with a view to suppress estrogen production the newer drugs include GnRH analogs. Aromatase inhibitors, estrogen receptor antagonist conservative surgery is cauterization of lesions cyst aspiration and cauterization of cyst wall, cystectomy is another mode of treatment other drugs used are danazole, visual inspection of pelvis by laparoscopy is gold standard for diagnosis, CA125 level has wide variations in endometriosis.^{6,7}

Endometriosis is estrogen dependent hence using letrazole leads to inhibition of aromatase enzyme leading to low estrogen levels and suppressing endometriosis. Prolonged use of this causes low estrogen effects on the bone hence to prevent this calcium and vitamin D is used along with letrazole and meprate.

This protocol is being used by Bengal Infertility Center (Birth Hospital) by Dr. Mukherjee and others with promising results.⁸

CONCLUSION

Aromatase enzyme inhibitor along with progesterone is a recent promising treatment for pelvic endometriosis. Aromatase enzyme is present in endometriotic cyst wall hence use of aromatase inhibitor lowers estrogen levels and decreasing of cyst size.

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Ethical approval: Not required

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