ABSTRACT

Study question
Is the IVF outcome with Dienogest Pre-IVF treatment in endometriosis comparable with GnRH analogue?

Summary answer
Yes, the IVF outcome with Dienogest Pre-IVF treatment in endometriosis is comparable with GnRH analogue.

OBJECTIVES

Dienogest is an oral progestin that has been investigated extensively in the treatment of endometriosis and studies have demonstrated that dienogest 2 mg daily effectively reduces endometriotic lesions, and improves quality of life. Dienogest also show a favorable safety and tolerability profile with predictable adverse effects, better patient compliance, and low withdrawal rates. GnRH agonists are an established therapy for endometriosis. Although GnRH agonists provide effective pain relief and reduce the progression of endometriotic implants, the hypoestrogenic state that they induce is associated with several side effects. Therefore, the use of GnRH agonists requires ‘add-back’ therapy.

STUDY DESIGN, SIZE, DURATION

Our study involved 46 infertile patients below 42 years old, who were treated at our hospital between Mar. 2014 to Dec. 2014. After confirming the diagnosis of endometriosis, the patients selected for IVF were randomly divided into two groups, using a computer generated list. The study group of 23 patients received GnRH-Analogue before IVF Primary Outcome Measure: Implantation rate and cumulative pregnancy rate. Secondary Outcome Measures: Gonadotropin usage, number of oocytes retrieved and miscarriage rate.

RESULTS

Cumulative clinical pregnancy rates were comparable in both the groups - 35% in study group (Dienogest) vs 39% in the control group (GnRH-Analogue). Implantation rates (21% vs 23%) and miscarriage rates (13% vs 11%) were also comparable. P-Value >0.05 Though the total Gonadotropin usage was lower in study group (Dienogest), it was not statistically significant.

LIMITATIONS, REASON FOR CAUTION

Adverse drug reactions with dienogest were breast discomfort, nausea, and irritability. Other adverse drug reactions included fatigue, weight gain, headache, depression, and breast engorgement. These side effects were those typical of progestins with no major safety concerns.

A relatively new concept in IVF in endometriosis, requiring more multicentric trials worldwide. Wider implications of the findings: Women with endometriosis treated with IVF have lower pregnancy rates compared to women with no endometriosis. Many treatment regimens have been suggested prior to performing IVF for these women. The present study confirms the fact that pre-treatment of women with endometriosis with a GnRH Analogue or Dienogest yields similar IVF outcomes with the latter giving a better patient compliance.

There was no significant difference in the amount of gonadotropin required between women in the two groups.

CONCLUSION

Our study indicate that Dienogest Pre-IVF treatment can safely replace GnRH-Analogue in endometriosis.

REFERENCES

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