

THE EFFECT OF SERUM CONCENTRATION OF LEUKAEMIA INHIBITORY FACTOR ON IN VITRO FERTILIZATION TREATMENT OUTCOME.

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ABSTRACT

PROBLEM

To evaluate the association of peripheral leukaemia inhibitory factor (LIF) levels on implantation and miscarriage rates after in vitro fertilization (IVF) treatment.

METHODS

Prospective observational study of 120 randomly selected women who underwent IVF treatment. The concentration of LIF in serum was determined by enzyme-linked immunosorbent assay.

RESULTS

There was no significant differences with regard to the systemic mean LIF concentration between the pregnant (42 patients, LIF: 11.55 pg/mL +/- 5.3 S.D.) and non-pregnant (66 patients, LIF: 13.47 pg/mL +/- 5.1 S.D.) women after IVF treatment. Likewise, for those women who have positive pregnancy after IVF treatment, the systemic mean LIF levels were not significantly different between women who have an ongoing pregnancy (34 ongoing pregnancy, LIF: 11.26 pg/mL +/- 5.2 S.D.) and those who had miscarriage (eight miscarriage, LIF: 12.78 pg/mL +/- 5.6 S.D.).

CONCLUSION

The systemic levels of LIF concentration have no association with implantation rate or miscarriage rate in women undergoing IVF treatment. Measuring serum LIF concentration prior to embryo transfer in IVF treatment has no predictive value of implantation rate or miscarriage rate.