

## LUTEAL PHASE LOW MOLECULAR WEIGHT HEPARIN DURING FRESH NON DONOR IN VITRO FERTILISATION (IVF) CYCLES IN PATIENTS WITH PREVIOUS FAILED IVF

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### Abstract Body

**Objective:** To study the effect of luteal phase low molecular weight heparin (LMWH) on implantation and clinical pregnancy rates in patients undergoing in vitro fertilization (IVF) with history of previous failed IVF.

**Design:** Non Blinded Randomised Controlled Trial

**Materials and Methods:** Fifty six infertile patients aged less than 38 years with history of one or more previous IVF failure and not previously on anticoagulants were recruited after informed consent from and randomized into study and control group. After ovarian stimulation with long agonist or antagonist protocol, those in the study group (n= 28) received low molecular weight heparin (Enoxaparin Sodium) 1 mg/kg subcutaneously from the day of oocyte retrieval in addition to progesterone. Those in the control group received only intramuscular or intravaginal micronized progesterone for luteal phase support. Patients were then followed till 20 weeks of pregnancy.

**Results:** The baseline characteristics were comparable in both the groups. The clinical pregnancy rate (CPR) in the study group was 17% (5/28). One patient in both the study group and control group had tubal ectopic which was managed surgically. The clinical pregnancy rate and implantation rates were compared using chi-square/ fischer exact test as appropriate. The CPR in the control group was 21.4% (6/28). There was no significant difference ( $p= 0.95$ ) in clinical pregnancy rate between both the groups. The implantation rate in the study and control group was 46% and 50% respectively and the difference was not statistically significant ( $p= 0.848$ ). The study is ongoing and patients are under follow up.

**Conclusion:** The definite role of low molecular weight heparin in patients with recurrent IVF failure cannot be conclusively established.