A DESCRIPTIVE STUDY ON THE USE OF GONADOTROPIN RELEASING HORMONE AGONIST OVULATION TRIGGER IN ASSISTED REPRODUCTIVE TECHNIQUES

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The risk of developing ovarian hyperstimulation syndrome (OHSS) post induction of ovulation in patients undergoing IVF has been greatly reduced by the introduction of GnRH agonists for ovulation induction. The pregnancy outcomes have not been fully evaluated when fresh embryo transfer takes place.

The objectives of this study are
1. To evaluate the incidence of moderate to severe OHSS in patients undergoing GnRH agonist induced ovulation
2. To evaluate the pregnancy rates achieved when GnRH agonist induced ovulation takes place and embryos are transferred fresh as opposed to frozen

Methods
This was a descriptive study looking at all patients undergoing IVF and placed on the Cetrotide® - cetrorelix acetate (GnRH antagonist) protocol that underwent ovulation induction with Lucrin® - Leuprorelin acetate (GnRH agonist) between the months of April 2010 through to April 2011. Patients younger than 18 and those defined as poor responders to IVF were excluded.

Results
Fifty nine patients were recruited for the study. The interquartile range for pre trigger estradiol was 12575 – 23672pmol/L with a mean of 18337pmol/L. Seven of the 59 subjects were coasted and only one patient developed moderate ovarian hyperstimulation syndrome.

The biochemical pregnancy rate was 39% at 14 day post embryo transfer and the clinical pregnancy rate was 34% at a seven week ultrasound.

Conclusion
GnRH agonist ovulation trigger almost entirely eliminates the risk of ovarian hyperstimulation syndrome and when fresh embryo transfer takes place it results in biochemical and clinical pregnancy rates which are acceptable.