



**A COMPARATIVE STUDY BETWEEN CLOMIPHENE CITRATE WITH
TIMED INTERCOURSE VS CLOMIPHENE CITRATE WITH IUI**

MADHU UDAWATH M.S., D.G.O.

*Srushti Medical Reseach Foundation Sushti hospital Pvt Ltd. No. 1., Padmavathy Street,
Thirumalai Nager, Ramapuram, Chennai-600089.*

ABSTRACT

Infertility is a condition caused due to both female and male factors and IUI can be the solution to many of these factors especially in unexplained infertility. A study involving 200 couples with nil female factors and normal semen parameters with an average period of 2-8 years of primary infertility were taken into consideration. The dose of clomiphene citrate was administered at 100mg/day from D2-D6 and follicles were monitored from D7 until the day of rupture, hcG 5000IU was given when the dominant follicle reached an average size of 18-20mm for both the study groups. This study aims to compare the success rates of ovulation induction and timed intercourse Vs intra-uterine insemination.

KEY WORDS: Primary infertility, clomiphene citrate, timed intercourse, intra-uterine insemination.



MADHU UDAWATH M.S., D.G.O.

Srushti Medical Reseach Foundation Sushti hospital Pvt Ltd. No. 1., Padmavathy Street,
Thirumalai Nager, Ramapuram, Chennai-600089.

INTRODUCTION

Infertility is due to both female and male factors and IUI can be the solution to many of these factors especially in unexplained infertility. A number of research papers have studied the effect of clomiphene citrate with reference to timed intercourse and intra-uterine insemination. This study involved 200 couples with nil female factors and normal semen parameters with an average period of 2-8 years of primary infertility. This study aims to review the benefit of performing an intra-uterine insemination over timed inter-course in these 200 couples taken into consideration.(1-2).

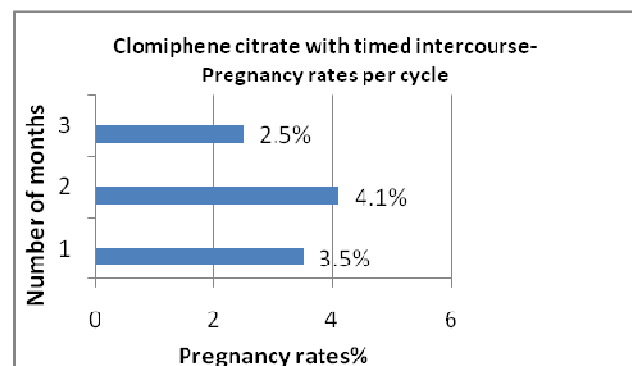
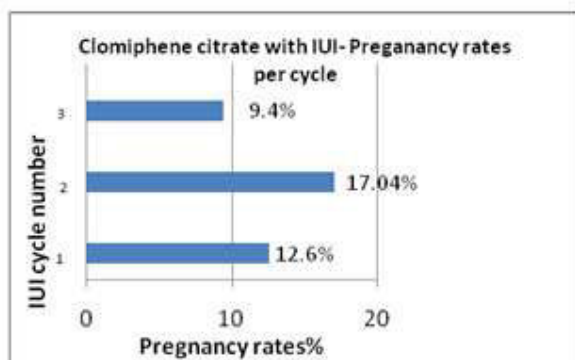
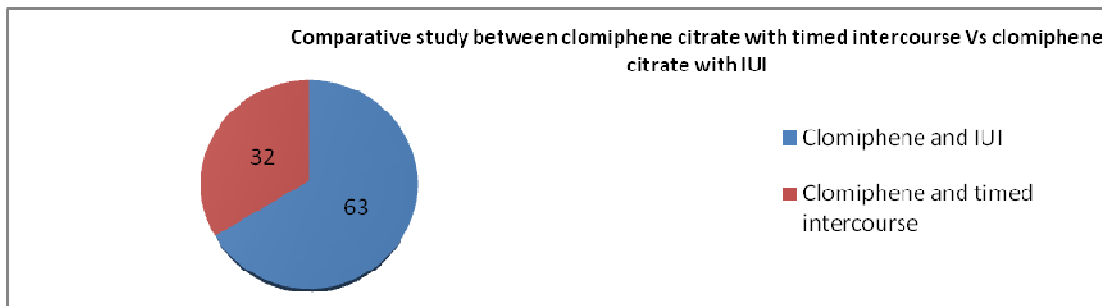
MATERIALS AND METHODS

200 couples with similar male and female parameters who came to our centre with no significant abnormality were selected for the study. The age group of the females were between 23-25 years and the males were between 25-45 years of age. From the study group, 100 couples were selected for CC with

timed intercourse group and rest of the 100 couples were taken up for CC with IUI. The study was carried over a period of 2 years.

RESULTS

Of the 200 couples, 63 couples conceived in the clomiphene citrate with IUI group, and 32 couples conceived naturally with clomiphene citrate and follicular monitoring. Of the 63 couples, who conceived with clomiphene and IUI, 12.6% conceived in the first IUI cycle, 17.04% conceived in the second IUI cycle and only 9.4% of couples conceived in the third cycle. The remaining couples in the study group did not conceive during the study period and were counselled for undergoing IVF treatment. Of the 32 couples who conceived naturally with clomiphene citrate and follicular monitoring, 3.5% conceived within the first two months, 4.1% conceived within the next 2 months and about 2.5% conceived during the last 2 months of the six month study period.



DISCUSSION

In both these study groups, the dose of clomiphene citrate was maintained at 100mg/day from D2-D6 and follicles were monitored from D7 until the day of rupture. hcG 5000IU was given when the dominant follicle reached an average size of 18-20mm. The clomiphene –timed intercourse group was asked to have an intercourse from D7 until one week post ovulation. The Clomiphene IUI group underwent two sittings of IUI with sperms processed by swim up method at 24 hours and 40 hours after 5000IU of hcG which was given when the dominant follicle reached an average size of 18-20 mm (3-5).

Improvement in success rates following IUI may be attributed to:

1. Enhancement of sperm motility
2. Increase in sperm concentration in the inseminated sperms

3. Bypassing problems related to erectile dysfunction such as premature ejaculation, performance anxiety and low volume ejaculates.
4. Bypassing problems at the level of the cervix viz; hostile cervical mucus, antibodies in the cervical mucus, ectropian or erosion of the cervix.
5. Other female factors like frigidity, vaginal infections etc.

CONCLUSION

From the study, it is evident that assisting nature by processing and inseminating sperms following ovulation induction with clomiphene citrate and follicular monitoring yield better pregnancy rates than ovulation induction with clomiphene citrate and follicular monitoring, followed by timed intercourse in otherwise normal couples.

REFERENCES

1. Cohlen BJ et al., "Timed intercourse versus intra-uterine insemination with or without ovarian hyperstimulation for subfertility in men" Cochrane Database Syst Rev. 2007 ;(3):CD00036.
2. Zollner U¹ et al., "Probability of success of conservative treatment of infertility: exact timing as an important prognostic factor" J Reprod Med. 2013 May-Jun; 58(5-6):205-11.
3. Martinez AR et al., "Intrauterine insemination does and clomiphene citrate does not improve fecundity in couples with infertility due to male or idiopathic factors: a prospective, randomized, controlled study" Fertil Steril. 1990 May; 53(5):847-53.
4. Hughes E et al., "Clomiphene citrate for unexplained subfertility in women" Cochrane Database Syst Rev. 2010 Jan 20;(1)
5. ESHRE Capri Workshop Group ., "Intrauterine insemination" Hum Reprod Update. 2009 May-Jun;15 (3):265-77.