


Summary
and
Conclusion



CONCLUSIONS

The present study was carried out on 80 infertile couples, those attended "Clinic" in MLB Medical College, Jhansi between 1st Sept, 2003 to 30th Aug, 2004.

Cases were evaluated for ovulatory defect. Patients were treated with 10 day course of Clomiphene in 100 mg doses started from 2nd day of period, those had shown resistance to standard 5 day course of clomiphene upto 150 mg/day doses started from 2nd day of period. Comparison was done with patients receiving clomiphene citrate. 15 cases were treated with 10 days course of clomiphene citrate and compared with 35 patients treated with clomiphene x 5 days. The following conclusions have been drawn:

1. For the infertility male and female both were responsible. Females alone were responsible for 55/0 of cases. Male alone were responsible for 10% of cases. Male and female both were responsible for 25% of cases while 10% of cases, labelled as unexplained infertility.
2. The incidence of primary infertility was 77.50% and that of secondary infection was 22.50/0.
3. The incidence of infertility was maximum in 21-30 years of age. Primary infertility was more in 21-25 years of patients i.e. 46.4% while secondary infertility was more in 26-30 years aged patients and that were 61.10/0.
4. Primary infertility was more prevalent in first 5 years of marriage that was' 46.780/0. Secondary infertility was more prevalent in the 6-10 years of marriage that was 44.44%.

5. The most important cause of infertility was ovulatory defect in both type of infertility. In primary infertility, ovulatory factors alone were responsible for 55.550/0 of cases, while in secondary infertility group 35% of cases were noted. Tubal factors are more important in secondary infertility than primary infertility i.e. 30% and 8.890/0 respectively.

Incidence of uterine factors was less than 100/0 in both groups. Cervical factors were responsible for 2.220/0 of cases of primary infertility. In 6.67% of cases of primary infertility tubal and ovarian both factors were present. In another 6.67% of cases ovarian and uterine both factors were present. In 8.89% of primary infertility tubal and uterine factors were present. There was one case (2.22%) in which tubal, ovarian and uterine three factors causing infertility were present. The same patient also had infertility, contributed with her husband.

In secondary infertility group 6.150/0 cases were allotted to each group i. e. tubal and ovarial, tubal and uterine factor and ovarian and uterine factor defects.

6. Average size of follicle just before the ovulation with 5 days course of clomiphene citrate was 19.8 mm while with x 10 days was 21.2 min.
7. Average day of ovulation in patients treated with 5 days course of clomiphene citrate was 14 and in patients CC 10 days treated with was 15.
8. Ovulation rate with 10 day course of clomiphene citrate was 66.66% and that with x 5 days 57%.

9. Conception occurred in 30% of ovulatory cycle in patients treated with 10 day course of clomiphene citrate and 20% of ovulatory cycles in CC 5 days.
10. There was not significant difference in cost of two cycles. Cost per cycle of CC for 10 days was Rs 120/- while cost per cycle of x 5 days was Rs 60/-.
11. No evidence of ovarian hyperstimulation in any induced cycle was seen.
12. In none of the induced cycle any other side effect of CC as visual disturbances, vasomotor flushes, nausea, pelvic discomfort or breast pain was reported.

In the end it is concluded that 10 day course of clomiphene citrate is simple, safe, non-invasive and cost effective form of treatment for poor infertile couples, those may not afford the gonadotrophins.

Infertility is the inability to conceive after 1 year of unprotected intercourse (WHO). Ovulation is one of the most important prerequisite for the fertility. Ovulatory disorders are responsible for 26-40% of all cases of female infertility. It is the most easily diagnosed and most treatable cause of infertility.

There is a Plethora of drugs "to overcome ovulatory defect and to induce ovulation. These drugs are clomiphene citrate, other anti estrogenic drugs, human menopausal gonadotrophins and gonadotrophins releasing hormones.

These drugs may be given alone or in combination, in different doses with different route, in different regimes according to type of ovulatory defect.

In the present study 80 infertile couples were studied. Out of 80 couples 35 females were having ovulatory defect. They were grouped in cases and control groups. 15 patients were labelled as cases, they received 100 mg of clomiphene citrate for 10 day from 2nd day of cycle after showing resistance to 150 mg/day clomiphene citrate for 5 days. 20 patients were labelled as controls and they received 100 mg of clomiphene per day from 2nd day of cycle for 5 days with Human menopausal gonadotrophins according to follicular growth and ovulatory response.

Transvaginal ultra sonography was used for the monitoring of follicular development and detection of ovulation.

- Following inferences were drawn from the study:
1. For the infertility male and female both were responsible. Females alone were responsible for 55% of cases. Male alone were responsible for 10% of cases. Male and female both were responsible for 25% of cases while 10% of cases, labelled as unexplained infertility.
 2. The incidence of primary infertility was 77.50% and that of secondary infertility was 22.50%.
 3. The incidence of infertility was maximum in 21-30 years of age. Primary infertility was more in 21-25 years of patients i.e. 46.4% while secondary infertility was more in 26-30 years aged patients and that were 61.1%.
 4. Primary infertility was more prevalent in first 5 years of marriage that was 46.78%. Secondary infertility was more prevalent in the 6-10 years of marriage that was 44.44%.
 5. The most important cause of infertility was ovulatory defect in both type of infertility. In primary infertility, ovulatory factors alone were responsible for 55.55% of cases, while in secondary infertility group 35% of cases were noted. Tubal factors are more important in secondary infertility than primary infertility i. e. 30% and 8.89% respectively.

Incidence of uterine factors was less than 10% in both groups. Cervical factors were responsible for 2.22% of cases of primary infertility. In 6.67% of cases of primary infertility tubal and ovarian both factors were present. In another 6.67% of cases ovarian and

uterine both factors were present. In 8.89% of primary infertility tubal and uterine factors were present. There was one case (2.22/0) in which tubal, ovarian and uterine three factors causing infertility were present. The same patient also had infertility, contributed with her husband In secondary infertility group 6.15% cases were allotted to each group i. e. tubal and ovarian, tubal and uterine factor and ovarian and uterine factor defects'

6. Average size of follicle just before the ovulation with 5 days course of clomiphene citrate was 19.8 mm while with clomiphene with 10 days it was 21.2 mm.
7. Average day of ovulation in patients treated with 10 days course of clomiphene citrate was 15 and in patients treated with CC 5 days was 14.
8. Ovulation rate with 10 days course of clomiphene citrate was 66.66% and that with clomiphene for 5 days was 57%.
9. Conception rate CC 10 days course was 30% & with 5 days course was 20%.
10. There was not significant difference in cost of two cycles. Cost per cycle of CC for 10 days was Rs. 120/- while cost per cycle for 5 days was 60/-.
11. No evidence of ovarian hyperstimulation in any induced cycle was seen.
12. In none of the induced cycle any other side effect of CC as visual disturbances, vasomotor flushes, nausea, pelvic discomfort or breast pain was reported.

In the end It is concluded that 10 day course of clomiphene citrate is simple,safe, non-invasive and cost effective form of treatment for poor infertile couples, those may not afford the gonadotrophins.