



**A COMPARISON OF RESULTS OF IUI WITH BORDERLINE SPERM
PARAMETERS VS IUI WITH NORMAL SPERM PARAMETERS IN
OTHERWISE NORMAL COUPLES.**

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ABSTRACT

Infertility due to male factor is on the rise due to many factors like sedentary lifestyles, westernization of diet and habits, prolonged work hours and increased stress etc. This study aims to validate the importance of intra-uterine insemination with borderline sperm parameters which is reported to be on the rise these days. A study involving 850 cases, of which 570 cases with borderline sperm counts and 290 cases with normal sperm counts were taken into consideration and intra-uterine insemination, was carried out for both the study groups. The success rates for both the study groups were compared with respect to the number of cycles of insemination done. However, earlier research suggests that the overall outcome of IUI depends on sperm quality, motility and concentration of the processed sperms used for insemination.

KEY WORDS: Infertility, intra-uterine insemination, normospermic and oligoasthenospermic



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INTRODUCTION

Incidences of male factor infertility are on the rise due to many factors like sedentary lifestyles, westernization of diet and habits, prolonged work hours and increased stress etc. Though insemination is a boon to couples who have failed to conceive naturally, the overall outcome of IUI is influenced by sperm quality, concentration and motility of the processed sperms. Some of these factors have been improved in the recent years with the help of anti-oxidants and changes in lifestyle (1-2).

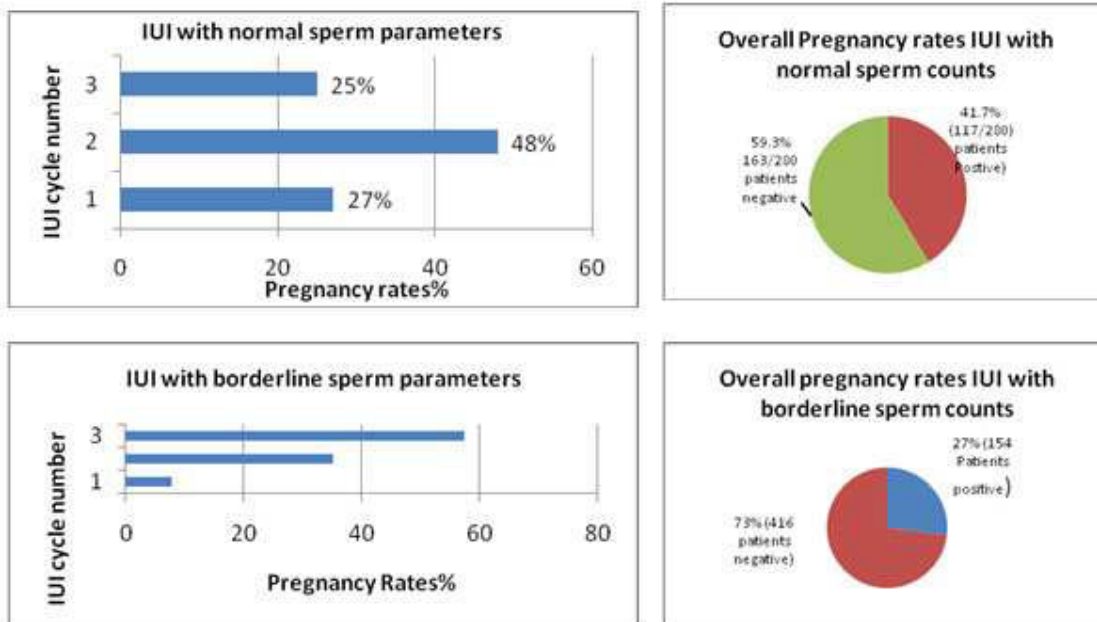
MATERIALS AND METHODS

From the infertile couples, who visited our centre from 2007-2012, we studied 850 cases retrospectively. Of these 570 males had borderline sperm parameters (10-20million/ml; 30-40% motility). The remaining 280 males had normal sperm parameters (>20 million/ml; >40% motility). All of them had between 1-6 cycles of IUI with

clomiphene and +/- gonadotrophins. IUI was done using swim-up method in all the IUI cycle, irrespective of the sperm counts and motility.

RESULTS

Out of 280 couples for whom IUI with normal sperm parameters was done, 27% conceived in the first cycle, 48% conceived in the second cycle and 8% of couples conceived in the third cycle. Totally, 117 (41.7%) couples conceived through an IUI with normal semen parameters. Out of the 570 couples for whom IUI with borderline semen parameters was done. 7.7% conceived in the first cycle, 35% conceived in the second cycle and 57.3% of couples conceived in the third cycle. Totally, 154 couples (27%) conceived through an IUI with borderline sperm counts. The remaining 73% of couples were counselled for undergoing IVF treatment.



DISCUSSION

For couples who have failed to conceive naturally, despite normal male and female factors, IUI has been found to have enhanced pregnancy rates. The counts and motility of

the processed sperm and the overall pregnancy rates were found to be almost 50% better in couples with normal sperm parameters. Sperm wash and retrieval

definitely improves the count and motility in the final inseminates of borderline sperm counts. But, there is definitely a marked difference in retrieval in terms of sperm counts and motility between normospermic and oligoasthenospermic cases. It is suggested that IUI can be attempted not more than 3-4 cycles for borderline counts and 2 or 3 more cycles can be attempted for normal parameters (3-5).

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CONCLUSION

From this study, it is clear that IUI is definitely the first line of treatment of couples with primary infertility with normal male and female factors. IUI could also be tried for couples with borderline male factors for a few cycles, before converting them for IVF treatment.