

## 82. A COMPARATIVE EVALUATION OF SPERM QUALITY FROM POOLED SEQUENTIAL EJACULATES OF MEN WITH NORMAL AND ABNORMAL SEMEN

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### INTRODUCTION:

Male factor contribution among infertile couples is around 60% as a single entity or combined with female factors. Assisted reproduction technology, Intra Uterine Insemination in particular, has become a mainstay therapy in treatment of male infertility.

Harvesting the maximum quantity of good quality spermatozoa is of extreme importance in managing male infertility using Assisted Reproductive Technologies.

### OBJECTIVE:

To compare the characteristics of two sequential ejaculates collected within 2 to 3 hours from men with normal and abnormal semen.

Method: Semen samples were collected for processing for Intra Uterine Insemination from men with normal (n =31) and abnormal semen parameters (n=186) after an abstinence of three days. A second ejaculate was also collected within 2-3 hours of the first ejaculate from both the groups. These semen samples were evaluated according to WHO guidelines before processing.

### RESULTS:

The mean volume of the first ejaculate was significantly higher than the second ejaculate in both groups. ( $p < 0.001$ ) However in men with abnormal semen variables the mean concentration and mean motility was significantly higher in the second ejaculate ( $p < 0.05$ ) than the first. In 43.7% of the semen abnormal group of men, the second ejaculate was better than the first one with regard to the total motile count. However, in the normozoospermic group semen volume and the total motile count were significantly higher in the first ejaculate than those of the second ejaculate ( $p < 0.001$ ). Hence in the normozoospermic group the total motile count was significantly lower in the second

sample ( $p < 0.001$ ). Further none of the individuals in this normal group had an improved total motile count in the second sample.

### CONCLUSION:

In the men whose semen parameters are poor, obtaining a second ejaculate contributes towards achieving a better harvest of sperm which can be used on its own or pooled with the first sample. Contribution of a second sample is not important in men with normal sperm parameters.