

## Role of Sexual Intercourse Timing and Frequency in the Management of Male Infertility

Raviraj S Kurabet<sup>1\*</sup>, Nithin Kumar<sup>2</sup> and Krishnamurthy N<sup>3</sup>

<sup>1,2,3</sup>Department of ShareeraRachana, SDMCA, Udupi, Karnataka, India

### Abstract

Infertility implies apparent failure to conceive. It is termed primary, if conception has never occurred and secondary, if one fails to conceive after achieving a previous conception. Although male and female are near about equally responsible for this, but incidence is increasing in male population. Causes of male infertility are categorized into three as Pre testicular, Testicular & Post testicular. Improper sexual timing and frequency are the most common post testicular causes of male infertility. This has been emphasized in Ayurvedic treatises under the heading of *Rutukala* in the context of *Garbhadhana*. Here an attempt is made to understand the role of sexual intercourse timing and frequency in the management of the male infertility.

### Keywords

*Infertility, Rutukala, Sexual intercourse time, Frequency*



**Greentree Group**

Received 15/08/16 Accepted 29/08/16 Published 10/09/16

## INTRODUCTION

Inability to conceive after 1 year of unprotected sexual intercourse is called infertility.

Male and female are equally responsible for it, but 40-50% of infertility accounts in male. Male's inability to cause pregnancy in a fertile female is termed as male infertility. At times everything is normal but the female is unable to conceive due to some reasons such as improper sexual timing and frequency.

## CAUSES OF MALE INFERTILITY<sup>1</sup>

The causes of male infertility are categorized into three as Pre testicular, Testicular & Post testicular.

### **Pre-testicular causes of infertility**

- Hypothalamic diseases-

Ex: Gonadotropin deficiency

- Pituitary diseases-

Ex: Pituitary insufficiency

### **Testicular causes of infertility**

- Chromosomal
- Testis injury
- Varicocele etc.

### **Post\_testicular causes of infertility**

#### **1. Reproductive tract obstruction-**

- Congenital blockage
- Vasectomy

#### **2. Disorders of sperm function or motility-**

- Maturation defect.
- Infections etc.

#### **3. Disorders of coitus-**

- Impotency
- Timing and frequency

## INTERCOURSE TIMING AND FREQUENCY<sup>2</sup>

The most important factor affecting chances of conceiving are the timing and frequency of intercourse in the fertile window.

Fertile window comprises of the days in menstrual cycle when pregnancy is possible. The length of this fertile phase is determined by the maximum life span of sperm and egg. Sperm can survive a maximum of five days in fertile cervical fluid and the ovum can survive up to one day. Fertile window is thus six days long, comprises of five days before ovulation and the day of ovulation. Chances of conception are high only when intercourse is done on these days. This indicates pregnancy is technically possible on any of these six days. The likelihood of actually becoming pregnant, however, is significantly increased in three days when intercourse is done on the day of ovulation and two days prior to the ovulation. This makes a practical fertile window of just three days.

In a recent analysis of 119,398 charts from women charting with Fertility Friend, it was found that 94% of women who became pregnant had intercourse on at least one of these three days, for conception purpose. It is thus ideal to have intercourse during these three days of fertile window which includes ovulation day and the two previous days<sup>3</sup>.

#### **RUTUKALA<sup>4</sup>**

Rutukala means optimum period for conception.

*Rutustu dvaadasharaatram bhavati dristhaartavah: adristhaartavaapyastieke bhashante*

*Su sha 3/6*

Rutu (period of conception) is of twelve days, when the *artava* is manifested.

Among the initial sixteen days of menstrual cycle leaving first three days and last one day which is not fit for the conception, remaining twelve days are considered as Rutukala.

*Niyata divaseeteete sankuchyatiambujam yatha*

*Rutauvyateete naaryaastu yonihi*

*samvriyate tatha.*

*Su sha 3/9*

As the lotus flower closes passively at the end of the day, woman's uterus contracts after the period of conception<sup>5</sup>.

As per modern science, about 5-6 days before ovulation, estrogen will be secreted

in raised amounts from the developing ovarian follicle to stimulate the uterus to secrete estrogenic mucus, which is biochemically and biophysically designed to facilitate the transport and survival of sperm within the cervix. After ovulation, progesterone is secreted in increasing amount by the corpus luteum. Progesterone stimulates the cervix to produce a different type of mucus, which is biochemically and biophysically designed to block the passage and prevent survival of sperm. This has led to the concept of biologic valve for the cervix, which is turned on by estrogen and turned off by progesterone<sup>6</sup>.

#### **Identifying the Fertile Window<sup>7</sup>**

To optimize the timing of intercourse during the fertile window, a couple must be able to identify these six days interval before and including the day of ovulation. Traditional and widely used means of identifying the day of ovulation and fertile window includes basal body temperature and calendar calculations. Newer means include serial ovarian ultrasound, monitoring hormones of urine and fertility charting of vaginal discharge.

#### **Intercourse Frequency<sup>8</sup>**

Probability of conception will increase when intercourse is done for multiple times in fertile window. While it is true that sperm concentration decrease

slightly with increased intercourse frequency, frequent intercourse is still more likely to result in conception than infrequent intercourse for couples with no male factor fertility issues. Each additional act of intercourse within fertile window increases probability of conception for that cycle.

If couples with known male factor issues are planning for conception then they should reduce the frequency of sexual intercourse during the fertile window to increase sperm supply as it is found to be more beneficial.

The study conducted by David Greening, Ob/Gyn and reproductive endocrinologist showed that frequent daily-sex decreases semen volume and sperm concentrations, but improved sperm motility and decreased sperm DNA fragmentation. It is important to note that this study evaluated sperm parameters but not pregnancy rates<sup>9</sup>.

## DISCUSSION

Age, health, lifestyle, and medical conditions, are the various factors which affect probability of pregnancy. One most important factor affecting chances of conceiving, however, is something that

partner can control, i.e., timing and frequency of intercourse infertile window. Optimum period for conception is clearly mentioned as *Rutu-kala* in Ayurveda. At the end of *Rutukala*, the *yoni* of a woman closes which prevents the conception; the same concept is accepted by modern science also as hormonal effect.

## CONCLUSION

The *Rutukala* (sexual intercourse time) and frequency are the important factors for the proper conception. Knowledge of these factors is very important in the management of male infertility.

## REFERENCES

1. Dr Sonalibhu, Dr Qui Yiqing, The Male infertility Ppt (Internet), 2014 August 2 (cited 2014 August 2) available from <http://authorsstream.com>
2. Intercourse Timing and Frequency-fertility friend (Internet), available from <http://www.fertilityfriend.com>
3. Intercourse Timing and Frequency-fertility friend (Internet), available from <http://www.fertilityfriend.com>
4. Sushruta, SushrutaSamhita, Sri Dalhanacharya commentary, edited by VaidyaYadavjiTrikamjiAcharya; publication Choukhamba Sanskrit Sansthanprakashan; Varanasi; UP; 2012; Pp:824; Page No:351
5. Sushruta, SushrutaSamhita, Sri Dalhanacharya commentary, edited by VaidyaYadavjiTrikamjiAcharya; publication Choukhamba Sanskrit Sansthanprakashan; Varanasi; UP; 2012; Pp:824; Page No:351
6. Stanford JB, white GL, Hatasaka H, Timing intercourse to achieve pregnancy: current evidence-NCBI(Internet), available from <https://www.ncbi.nlm.nih.gov>
7. Stanford JB, white GL, Hatasaka H, Timing intercourse to achieve pregnancy: current evidence-NCBI(Internet), available from <https://www.ncbi.nlm.nih.gov>
8. Intercourse Timing and Frequency-fertility friend (Internet), available from <http://www.fertilityfriend.com>
9. Laurence A. Jacobs, fertility centres of illionois(Internet), Best sexual frequency for pregnancy? 2011 June 7(cited 2011 june 7), Available from <https://www.fertilityauthority.com>