



MALE INFERTILITY OVERVIEW-ASSESSMENT, DIAGNOSIS AND TREATMENT IN BUNDELKHAND REGION JHANSI

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ABSTRACT

Infertility is when a couple have been unprotected regular sexual relation for one year without achieving a pregnancy. Male factor is the sole cause of infertility in 20% of infertile couples. Aim of this study is to find various factors responsible, variations in sperm morphology and to treat accordingly. It is a descriptive study conducted over a period of one year in department of obs and gynae MLB medical college jhansi comprised of 100 infertile males. This study concluded that identification of causes, treatment and proper counselling result in good outcome.

KEYWORDS : male infertility, semen analysis, treatment of infertility

INTRODUCTION

Infertility is when a couple have been unprotected regular sexual relation for one year without achieving a pregnancy. There are two types of infertility- Primary-neither partner having achieved a pregnancy Secondary-when a pregnancy has previously been achieved by the couple Male fertility peaks at about 35 years of age and declines sharply after 45 years of age. Male factor is the sole cause of infertility in 20% of infertile couples. A paternal age more than 40 years is associated with a 20% greater chance of birth defects in offspring. Advanced male age has been associated with significant reductions in pregnancy rates, increased time to pregnancy and increased subfecundity.

AIMS AND OBJECTIVES

To study the various factors responsible for male infertility. To study various aspects of sperm specially regarding motility, morphology and count in a semen sample. To arrive at proper diagnosis and to give proper treatment

MATERIAL AND METHODS

Source of data- The study was conducted on male partners of women who did not conceive a pregnancy after one year of unprotected sexual intercourse at department of obs n gynae MLB medical college jhansi. Study includes 100 infertile males in one year duration from april 2016 to march 2017. Inclusion criteria- all males between 21-50 years, clinically diagnosed with infertility. Exclusion criteria- all males below 21 and above 50 years of age Men with obesity, cardiovascular problem, HIV positive and hepatitis(HBsAg) positive

OBSERVATIONS

Table-1 age distribution

Age in years	No. Of patients	percentage
<25	19	19%
26-30	38	38%
31-35	32	32%
>35	11	11%

Table-2 Patients belonging to rural/urban

	No. Of patients	percentage
Rural	56	56%
Urban	44	44%

Table-3 Types of infertility

	No. Of patients	percentage
Primary infertility	80	80%
Secondary infertility	20	20%

Table-4 Distribution of cases according to semen abnormality

	No. Of patients	percentage
Azoospermia	13	17.56%
Oligozoospermia	15	20.2%
Oligoasthenozoospermia	27	36.48%
Pus cells	19	25.6%

Table-5 endocrinal evaluation in azoospermic cases

Hormone	No. Of patients	Elevated or borderline elevated	Normal	Depressed
S.FSH	10	6	4	-
S.TESTOSTERONE	10	-	4	6
S.LH	10	6	4	-

RESULTS

Total of 42 males (27 with oligoasthenozoospermia and 15 with oligozoospermia) were given medical treatment and 24 were found to have increase in sperm count, motility, concentration and quality 26% (19) of patients also showed pus cells in semen examination they were given antibiotic (doxycycline 100mg BD for 14 days) Six Patients showed testicular failure as evidenced by increase in FSH and LH and decrease in testosterone level. Testicular biopsy done in these six patients, 3 of them showed maturation arrest and 3 showed testicular atrophy Four patients with normal FSH, LH and testosterone were found to have obstructive azoospermia diagnosed by vasography. 6 out of 10 azoospermic patients showed testicular failure, maturation arrest in 3 males and testicular atrophy in 3, as they are untreatable conditions so they were offered donor insemination and adoption. 4 out of 10 with obstructive azoospermia were offered ICSI, MESA, TESE and IVF as they were not ready to undergo surgical procedure. 26 males in which no abnormality was detected, so they were advised to investigate female partner and offered IUI and IVF, if no abnormality detected in female partner

DISCUSSION

In this study semen abnormality was found higher compared to other regions. The reason for this difference can lie basically in the quality of population studied. Bundelkhand region is specially recognized as a very backward region both economically and socially. This is projected in high prevalence of infectious disease. Nutrition in this region is also very poor reflected by a greater incidence of malnutrition and anemia. The low incidence of secondary infertility in the study may not reflect its actual incidence reason being couples with one child who subsequently became secondarily infertile adapt to this situation and will not seek medical attention. We also found that second semen sample was better than first, one reason for this was probably patient education and we observe that the patient were much confident in giving sample for the second time so sample collected in more efficient way without loss of much semen volume. In the study average sperm count of persons whose semen was categorized as normal was 72.6 ± 6.2 millions/ml. This low sperm could be because of many factors like heat, wearing of tight langots and dhotis, high incidence of smoking and tobacco chewing habits, general malnutrition and high incidence of exposure to chemical pesticides in this predominantly rural farming society

CONCLUSION

We conclude that there many factors responsible for male infertility specially in bundelkhand region. Social factors like illiteracy, hesitation and ignorance. Malnutrition and anemia. Tobacco and smoking. Personal hygiene. Working in hot environment. Education. These factors are sometimes major hurdles in getting the male consent for his full evaluation simultaneously with the female and proper patients education and counselling should be a vital part of any infertility programme.

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