



Gynecology

STUDY OF ETIOLOGICAL FACTORS OF FEMALE INFERTILITY IN A TERTIARY CARE MEDICAL COLLEGE AND HOSPITAL

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ABSTRACT Infertility is traditionally described as inability of a couple to conceive after one year of unprotected intercourse. Although the original definition still stands, recent evidence suggests that the definition should be more relaxed and should include couples who, within the period of one year, already have recognised pathology which may cause difficulty in conception. Newer guidelines define infertility as failure to conceive after 1 year of unprotected intercourse, and in women over 35 years of age within 6 months of unprotected intercourse. Infertility is turning out to be the one of the most common reason for women attending the Gynecology OPD. This study was undertaken with the aim of identifying the most common causes of infertility in women attending the Gynecology OPD at a tertiary care hospital in a tier 3 metro city.

KEYWORDS : Infertility, female factor, causes Infertility, male infertility, etiology, metro city,OPD

Introduction

Birth of a child is considered one of the most important factors determining general happiness and satisfaction of a couple. In a country like India the need to have a child is magnified by the necessity of producing a male child to 'carry forward the family name'. In event of delay or inability in conceiving, the couple along with their family go through a harrowing, distressing time which has physical as well as psychological implications on a woman's health.

Infertility, in the broad definition includes couples who are unable to conceive even after one year of regular unprotected intercourse. Newer guidelines suggest relaxation of the stringent time period of 1 year if the couple has identified risk factors, to encourage earlier identification and treatment in the highest risk groups. According to new guidelines published by the ASRM in June 2008 (1), women over 35 years of age are now encouraged to seek fertility treatment if they fail to conceive after only six months of trying. The WHO estimates the overall prevalence of infertility in India to be between 3.9% and 16.8% varying widely in different states. In another study performed in 2016, the reported prevalence of infertility was 12.5% (CI 95% 11.7–13.3) among women and 10.1% (CI 95% 9.2–11.1) among men. (2)

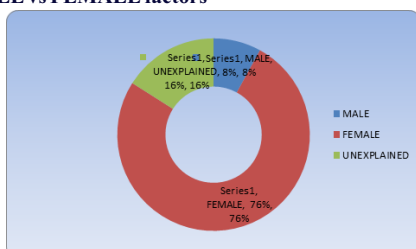
Primary infertility is defined as inability to conceive after one year of regular unprotected intercourse. Secondary infertility includes couples who were able to conceive earlier but even after one year of trying are unable to do so now. The causes of infertility in a couple could be male related factors or female factors. Among the female causes of infertility, PID, endometriosis, hormonal causes predominate. Among the males abnormal semen parameters are the leading causes of infertility.

Methods

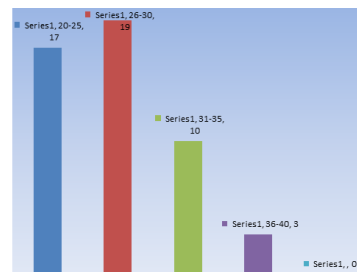
The study was conducted in the gynecology OPD in a tertiary care hospital in Mumbai for a period of 2 months from January to March 2018. All women in the reproductive age group presenting with the chief complain of infertility were included in the study. Details regarding age, married life, obstetric history, medical/surgical history, previous infertility treatment taken, investigations done, husband details were noted.

RESULTS

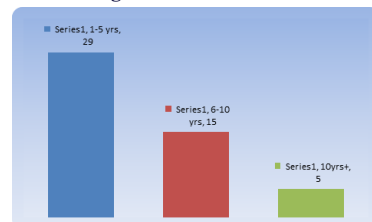
1. MALE vs FEMALE factors



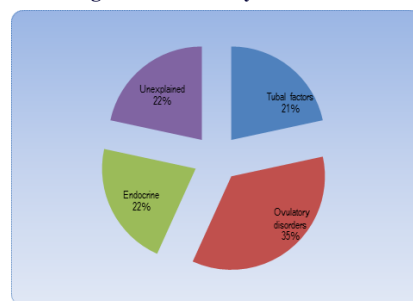
2. Age



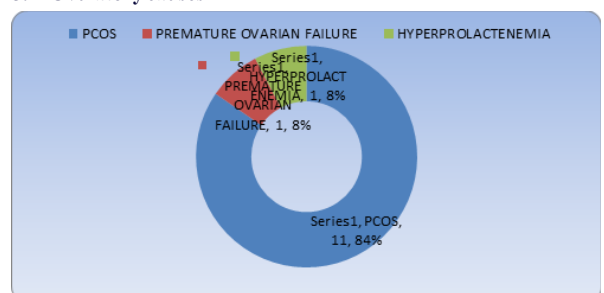
3. Duration of marriage



4. Factors causing female infertility



5. Ovulatory causes



Discussion

According to our study, 76 % cases of infertile couples had a recognized female factor, 8% had a known male factor and 16% were unknown causes with preliminary investigations being normal. According to a study done in 2015, 88 % of the infertile couples had a female cause. (3) In another study approximately 50% of cases are due to female factors, and 20-30% of cases are due to male factors. The remaining 20-30% of infertility cases may be due to a combination of male and female factors. (4)

Among women with infertility, the age group presenting most commonly was 26-30 years of age, with duration of marriage being around 1 to 5 years. Fertility in women is age related with the peak in fertility at 27 years of age and declining to almost half beyond 35 years. Most studies show that fertility in women declines with age beyond 30 years of age. (5) The age group represents the women with complains of new onset menstrual irregularities and anxiety about conception. The duration of marriage varied among the couples presenting to us. The commonest group included couples newly married, medically aware and with access to health facility, who were anxious to conceive.)

Among causes for female factor infertility, ovulatory causes were identified in 33 % cases causes the one that stood out was polycystic ovarian syndrome in 84% cases. Other ovarian causes were anovulatory cycles due to thyroid disturbances or hyperprolactinemia (8%). Rarely a premature ovarian failure as suggested by high FSH and AMH levels in a woman < 30 years of age was seen. The most common identifiable factors that accounted for female infertility, were ovulatory disorders (25%), endometriosis (15%), pelvic adhesions (11%), tubal blockage (11%), other tubal abnormalities (11 %), and hyperprolactinemia (7%). Other reports describe ovulatory disorders as responsible for more than half of the causes of female infertility (6)

Conclusion

The study showed us the population dynamics of couples presenting to the infertility OPD in a tertiary care medical college and hospital in a metro city. Couples in metro cities tend to approach a health facility within a shorter duration of marriage because of higher awareness levels. Compared to male infertility, female causes of infertility are significantly higher (8% vs 76%). In the age group presenting to us in most number i.e 26 yrs – 30 yrs , Polycystic ovarian syndrome was the most common cause of infertility. Among other causes of female infertility, thyroid disorders and tubal factors were also significant.

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