

SEMEN APPRAISAL REPORT AND CLINICAL INFORMATION OF INFERTILE MEN FROM SOUTH INDIA

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ABSTRACT

In a society, increasing conscious of individual rights and quality of life, infertility is beginning to assume an important approach than excess fertility. Thus infertility is considered as an important national problem concerning reproductive health. Global incidence of infertility is about 13-18%. The prevalence of infertility in India is about 15% and the male factor was responsible for half of it. A number of clinical conditions and disease entities with genetic and non-genetic forms can render a man infertile. Our study contains 102 semen samples of adult infertile men and 50 of normospermic men from Erode and Nilgiri Districts of Tamilnadu, South India. Semen samples were obtained by masturbation and sperms in their ejaculate were analysed for their motility, number and morphology. Semen analysis in the whole group of infertile men ranged from azoospermia to oligozoospermia whereas normospermic men revealed normal count. Clinical profile of our study revealed interesting informations which gives an idea that any one of those factors may/may not be responsible for their infertility. In conclusion, infertile men with asthenospermia is high and azoospermic men were low in our population. This situation warrants that genetic factors to be investigated. Since asthenospermia caused by low motility of sperms is high in our study, mitochondrial DNA analysis can be performed for those samples.

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In a society, increasing conscious of individual rights and quality of life, infertility is beginning to assume an important approach than excess fertility. In India, although population growth is a major concern, there are a substantial number of infertile couples. Thus infertility is considered as an important national problem concerning reproductive health. Infertility is defined as the state in which a couple wanting a child is unable to conceive after 12 months of regular intercourse in the absence of contraceptives. It is a problem faced by couples rather than individuals.

Global incidence of infertility is about 13-18% Thonneau et al (1991); Jones and Toner(1993);Irvine (1998). The prevalence of infertility in India is about 15% and the male factor was responsible for half of it. A male factor can be diagnosed in approximately 50% Meschede et al. (1997) of them and about 30-40% of male infertility is due to unknown origin Bhasin et al. (1994); Peterlin et al. (2002). So, male infertility is an increasing problem in industrialized society. A number of clinical conditions and disease entities with genetic and non-genetic forms like hypogonadotropic hypogonadism, testicular maldescence,

structural abnormalities of the male genital tract, genital infections, previous scrotal or inguinal surgery, varicoceles Ambasadhan et al. (2003), chronic illness, medication and exposure to chemicals, ozone Sokol et al. (2006); Seshigiri (2001) can render a man infertile. For about 30% of men there is genetic origin. Our study particularly concentrates on semen appraisal report and associated clinical conditions of infertile men from rural areas of Tamilnadu, South India.

MATERIALS AND METHODS

Our study contains 102 semen samples of adult infertile men who were affected by idiopathic azoospermia, oligozoospermia or necrospermia and attending infertility clinics at Erode and Nilgiri Districts of Tamilnadu, South India. Semen samples were obtained by masturbation on two different occasions, separated by a 3-week interval, following a 3-day period of sexual abstinence. Semen samples were allowed to liquefy for 30 minutes at 37°C. Sperms in their ejaculates were analysed for their motility, number and morphology according to the guidelines of the WHO (1992). The clinical selection of sterile patients were started by filling in an extensive questionnaire (pre designed performa) during sample collection and in most cases other pedigree