

FP26. SPERM QUALITY OF HEALTHY VOLUNTEER SPERM DONORS AND THE RESULTS OF A DONOR SPERM INSEMINATION PROGRAMME

HR Seneviratne, A Kaluarachchi, S Wijeratne, C Nelson, V Gunawardena, S Rajapakse, Vindana Reproductive Health Centre, No 9, Barnes Place, Colombo 07

Introduction: Use of donor sperm for intra uterine insemination in the treatment of severe male factor infertility is a common treatment modality. However sperm banking and donor sperm insemination is relatively new to Sri Lanka. Moreover base line data on seminal parameters of healthy volunteers are not available in the country.

Objectives: To evaluate the status of donor sperm parameters and the results of donor sperm insemination at a recently established sperm bank in Sri Lanka.

Methodology: Data from the records (n=96) of the sperm donor programme and results 120 donor insemination treatment cycles in 52 recipient couples using frozen semen samples of 29 donors were analysed. The mean treatment cycles per sperm donor were 4.1.

Results: Of the 96 men volunteered to donate semen, only 43.7 % (n= 42) had all the sperm parameters within normal limits as per WHO

criteria. In 46.3% cases either a single or a combination of sperm abnormalities were found. Two volunteers were azoospermic. Oligozoospermia was found in 10.4% (n=10), asthenozoospermia in 49.5% (n=46) and teratozoospermia in 19.8 % (n=16). Of the recipient couples (n=52), mean duration of infertility was 4.9 (range 3-14) years and mean age of the female partners was 33.3 (range 20-41) years. Among the male partners of recipient couples, 76.5% (n=40) had azoospermia, 5.9% (n=3) had aspermia and 17.6% (n=9) had severe oligoasthenoteratozoospermia. The success rate of the sperm donor programme as per recorded data was 31.4% (n=16) per couple and 13.3% per treatment cycle. The highest success rate was observed in the first attempt while the cumulative rate increased up to the 4th attempt. A higher percentage of the pregnant women were less than 30 years of age.

Conclusions: In Healthy men volunteering to donate sperm the prevalence of sperm abnormalities is high, the commonest abnormality is asthenozoospermia. The success rate of the sperm donor programme is 31.4 % per couple and 13.3% per treatment cycle. The highest success rate was at the first attempt while the cumulative rate increases up to the 4th attempt. As in all infertility treatment procedures, the age of the female is a critical factor in the success of donor insemination.