
Using frozen donor semen for artificial insemination is an established practice throughout the world. Donor recruitment for a sperm bank program is difficult and slow because of high dropout rates and a high rejection rate of men who fail to meet the guidelines established by American Society for Reproductive Medicine and American Association of Tissue Banks for selection of donors for sperm bank programs. This study determined the profile of successful donors in our sperm bank and documented the reasons for rejection. A total of 199 men were screened from 1986 to 1994; 173 (87%) men were rejected as they failed to meet the minimum guidelines or dropped out. The 26 accepted donors (group I) and 17 rejected men (group II, selected on the basis of two consecutive semen analyses) were included. Sperm quality variables (volume, motility, velocity, linearity, motile sperm count (MSC), amplitude of lateral head displacement and abstinence) demographic data (age, race, religion, marital status, education, occupation, smoking, alcohol, caffeine, and drug use) were compared between the groups. Accepted donors had significantly better semen quality compared to rejected donors: motility (P<0.01); velocity (P<0.001); MSC (P<0.0001); linearity (P<0.001); and ALH (P<0.001). Ejaculate volume and length of abstinence did not differ between the groups. Analysis of demographic information revealed significant differences in marital status: more rejected donors were single (n=15) than accepted donors (n=15) (P<0.045). Group I consumed more caffeine (P<0.001) and the difference in educational level (college or more) was near-significant (P<0.055) with Group I being higher. No significant differences were found in regard to other demographic data. Our results indicate that poor semen quality is one of the most important causes of rejection of men in a donor sperm bank program. The percentage decline in semen quality after cryopreservation between accepted and rejected men was not significant.