Abstract

Objective: The aim of the present study was to evaluate in 111 ejaculates from fertile men membrane integrity of spermatozoa before selection and sperm motility, and sperm concentration and chromatin integrity before and after selection of motile spermatozoa. Methods: We evaluated the membrane integrity (using hypoosmotic swelling test and Eosin-Y) before separation and chromatin integrity (using acridine orange), concentration and motility before and after separation by migration sedimentation technique. All individuals had pregnant wives or had procreated a baby during the last year. Results: The data of sperm membrane integrity by the eosin-Y and hypoosmotic swelling tests did not show significant statistical differences and the correlation between them was low. The percentage of motile sperm (grades a + b) increased from 57% to 87% (p <0.001), the concentration decreased from 89 to 31 x 10^6 sperm/mL (p <0.001) and chromatin integrity increased significantly (p <0.0001) after separation of semen. Conclusions: The great variation in the values obtained in the functional test in fertile males requires a re-evaluation of the use of these tests in clinical practice of infertility.

Keywords
Spermatozoa, Chromatin, Eosin Y, Fertilization, Fertile men