

Abstract

OBJECTIVE:

To determine the prevalence of low sperm count including oligospermia and azoospermia in male infertile population, and to assess the pattern and distribution of abnormal semen parameters in infertile men.

METHODS:

The descriptive cross-sectional survey was carried out at the Department of Gynecology and Obstetrics, Sharif Medical City Hospital, Lahore, from June 2009 to June 2010. A total of 500 consecutively consenting male partners of women fulfilling the inclusion criteria between 20 and 40 years of age were approached. Semen analysis was performed according to methods and standards defined by the World Health Organisation (WHO). Samples were categorised into normospermia, oligospermia and azoospermia on the basis of sperm count. After exclusion of azoospermic samples, normospermic and oligospermic samples were compared for ejaculated volume, pus cells, motility and morphology. SPSS 10 was used for statistical analysis.

RESULTS:

Out of the 500 males approached, 104 (20.8%) had to be left out either because of their unwillingness or inability to pass semen. The study sample comprised of 396 (response rate 79.2%); normospermia was observed in 293 (73.99%) males, azoospermia in 59 (14.89%), and oligospermia in 44 (11.11%). The oligospermic samples had low ejaculated volume, but significantly higher percentage of non-motile sperms 62% +/- 23.9% and abnormal morphology 55% +/- 15.6% in comparison to normospermic samples (p 0.0001). Asthenospermia was observed in 37 (25.81%), teratospermia in 11 (3.26%) and oligoasthenoteratospermia in 4 (9.09%) of samples.

CONCLUSION:

Semen analysis is the cornerstone for the evaluation of infertility in men. Sperm concentration, motility and morphology are related to each other, factors that cause deterioration of one of them usually also have negative impact on the other two as well.