

INTRODUCTION AND AIM OF THE WORK

Introduction :

The significance of leukocytospermia in semen remains controversial, evidence exists that white blood cells (WBCs) may adversely affect sperm function and act as a potential cofactor in male infertility (*Shekarriz et al., 1995*). Also, *Chan et al. (1994)* reported that the presence of high numbers of polymorphic nuclear leukocytes in ejaculated semen significantly reduce sperm hyperactivation, an important step during sperm capacitation. On the other hand *Tomlinson et al. (1993)* reported that leukocyte concentration (total or individual subsets) was not associated with either reduced semen quality or conception rate. *Fedder et al. (1993)* reported that, a high number of leukocyte was neither significantly associated to an increased proportion of abnormal sperm nor to reduced sperm motility. *Kiessling et al. (1995)* found direct correlation between leukocyte density and sperm with ideal morphology according to strict criteria in 24 infertile males with normal sperm count, and this finding supported their concept that leukocytes in semen may play physiologic role by eliminating abnormal spermatozoa from ejaculated semen.

MacLeod (1970) found that the infection causes an increase in the percentage of tapering, amorphous heads and of spermatids. *Fowlkes et al. (1975)* and *Toth et al. (1978)*, found that coiled- tailed sperms are more frequent with ureaplasma urealyticum infection. The clinical relevance of sperm morphology and its relationship with sperm function

and sperm mucus interactions are controversies subjects. *Kruger et al., (1988)*, introduced a very strict classification for spermatozoal morphology based partly on the appearance of sperm in the mucus of the upper cervical canal (*Menkveld et al., 1990*). The advantage of strict morphology evaluation is the fact that it is reproducible in between patient and in between different technicians performing the test. It also allows the clinician to classify the patient into one of two specific groups ($\leq 14\%$ and 14% normal morphology), giving a reliable criterion that can be used to counsel the patient and to plan the approach in future IVF cycles (*Kruger et al., 1987*).

On reviewing the literature available till the year 1996, no studies on the leukocytospermia samples using the strict morphological criteria were found. The aim of the present study is to assess sperm morphology using strict (Tygerberg) criteria in infertile patients with leukocytospermia compared to normal fertile individuals.