SUMMARY

There is controversy on the significance of white blood cell in semen. Whereas some authors did not observe sperm damage in the presence of leukocytospermia, others have found evidence that white blood cells are significant co-factors of male infertility, and the presence of leukocytes, to the point of leukocytospermia influence any component of the semen profile.

The objective of this study was to determine the effect of leukocytes in semen on sperm morphology. A prospective comparative study including 70 patients attending the Andrology Department Kasr El-Aini Hospital. (57 infertile patients and 13 control men with proven fertility) was done.

Each patient was subjected to history taking, clinical examination, conventional semen analysis and peroxidase test. The presence of more than 10 peroxidase positive cells (leukocyte)/ high power field (HPF) was considered to present infection. Fixed smears are made for staining with papanicolaou stain. Abnormalities of sperm morphology were counted according to strict criteria.

There was a significantly higher rate of head anomalies, particularly tapering form in cases of leukocytospermia (range from 6 to 30%) ($P = 0.0007$), amorphous form range from (13 to 37%) ($P = 0.0006$), sperm tail especially coiled tail ranged from (6 to 30%) ($P < 0.0001$) when 15% normal forms were taken as a threshold for in - vivo fertility
potential, 13 from 57 had 14% normal forms based on strict criteria, while all control cases (13) 100% sperm morphology 14% (P > 0.05) total abnormal forms ranged from (65 to 90%).

This study supported the opinion that infection increases the numbers of abnormal forms especially amorphous, tapering head and coiled tails and might have an effect on fertility.