SUMMARY AND CONCLUSION

Varicocele is a well established cause of male infertility . Varicocelectomy has been noted to result in improvement in semen quality in 60% to 80% of cases and a pregnancy rate of 25% to 62% have been reported . Different surgical and non-surgical techniques are well known . These techniques vary greatly as regard their simplicity, morbidity and improvement in semen parameters, fertilizing capacity and conception rate .

This study included 50 patients complaining of primary infertility and had clinically manifest left sided varicocele . Thorough history taking, general and local examination and pre-operative semen parameters and fertilizing capacity were determined . The patients of the study were then divided into two groups, each involved 25 patients . One group was subjected to Palomo varicocelectomy and the other was subjected to inguinal varicocelectomy . The cases were then followed-up 3, 6, 9, and 12 months after the operation by semen analysis to determine improvement in semen parameters and fertilizing capacity if it happened and pregnancy was reported by the patients during one year of follow-up period .

The results of the study were statistically analysed and the following conclusions were obtained :

(1) Age of the patients, duration of infertility, presence or absence of varicosities or past history of bilharziasis, all have no relationship to pregnancy rate after varicocelectomy .

(2) The grade of varicocele has no effect on pre-operative or post-operative semen parameters, fertilizing capacity or conception rate after varicocelectomy .

(3) Pre-operative semen parameters to great extent determine the outcome of surgery . The better the pre-operative semen parameters, the higher the pregnancy rate after varicocelectomy .

(4) Pre-operative sperm count above 20 million / c.c. has a good prognostic value regard post-operative pregnancy rate .

(5) Pregnancy after varicocelectomy occurs due to improvement in all semen parameters and fertilizing capacity .

(6) After varicocelectomy, improvement in motility percentage, abnormal forms percentage and swelling test percentage, occur earlier than improvement in the sperm count .

(7) After varicocelectomy, pregnancy usually occurs within 3 to 9 months post-operative, the period during which semen parameters and fertilizing capacity improve to the level that they can achieve conception .

(8) Palomo varicocelectomy is better than the inguinal varicocelectomy as regard its effect on semen parameters, fertilizing capacity and conception rate in subfertile men with varicocele .

(9) The hypo-osmotic swelling test is not a replacement for semen analysis . In fact the two tests are complementary as the swelling test is a new parameter of the fertility status

(10) The hypo-osmotic swelling test is an economic and easy one . It can readily be performed in any clinical setting .

(11) There is a significant increase in the sperm count and motility and decrease in the abnormal forms after varicocelectomy which run alongside with the significant improvement in the sperm swelling test .