ABSTRACT  Infertility is condition where pregnancy was never took place after 12 months of coitus without contraception. This is a problem of a spouse, since husband and wife has their own contribution in the rate of success of fertility potency of the spouse. Assisted Reproductive Technology (ART) is medical techniques to help reproductive process in over coming the the impediment of the meeting of a sperm and an ovum that leads to a conception or fertilization. Artificial Insemination technique using husband’s sperm has a long record in helping infertile couple, but its rate of success is merely around 5%. Other technique is GIFT or Gamete Intra-Follopian Transfer, ZIFT or Zygote Intra Follopian Transfer and IVFET or In Vitro Fertilization-Embryo Transfer. The implementation of ART technique with micro manipulation gives hope to improve the rate of success, particularly to the infertile couple where husband has poor sperm condition. In 1992 is the milestone where the first pregnancy using ICSI or Intra Cytoplasmic Sperm Injection was published. From that time on, the rate of success is significantly improving The ICSI technique uses only one spermatozoon to fertilize an ovum.