The purpose of the present presentation is to review the medical problems associated with ART, mainly IVF-ET. The problems are as follows.

1. Ovarian hyperstimulation syndrome (OHSS): The incidence of moderate and severe OHSS in women treated by ART is 2%~11% and 0.1%~2% retrospectively. While mild OHSS is of no clinical relevance, severe OHSS is a life-threatening complication. Despite major advances in monitoring facilities, the severe forms have not been prevented. Prevention of OHSS depends on its accurate prediction by ultrasound and serum estradiol and either a clinical decision to withhold hCG and abandon the cycle, or to cryopreserve the embryos and replace them in a subsequent cycle.

2. Multiple pregnancy: The introduction of ovulation inducing agents and, more recently, of ART has resulted in a substantial increase in the incidence of multiple pregnancies of up to 10 times, 10%~29%. As the number of multiple fetus increases in utero, so does the incidence of complication and the possibility of adverse outcome.

3. Spontaneous abortion: The incidence of spontaneous abortion is 13%~34%.

4. Ectopic pregnancy and heterotopic pregnancy: The incidence of ectopic pregnancy and heterotopic pregnancy is 3%~5% and 0.6%~1%.

5. Congenital malformations: The incidence of congenital malformation is 1.9%~3.3%. The potential association between ovulation induction and neural tube defects has been discussed, but it is still controversial.

6. Problems associated with oocyte retrieval: Surgical trauma, infections and complications of anesthesia may be caused.

7. Culture media: The use of heterologous pooled serum exposes the culture media to the risk of infection, especially to Hepatitis and HIV viruses.

8. Ovarian cancer: Recent data raised the question whether ovulation induction is associated with ovarian cancer. At present, there is no need to change medical practice regarding use of fertility enhancing drugs. There is enough cause for concern, however, to alter the physician's approach to counseling patients. More basic and epidemiologic research is needed to put the causal relationship between fertility drug usage and ovarian cancer into perspective.