Complications of ovarian stimulation

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Ovarian stimulation is an integral part of infertility therapy and although it has been a blessing for many infertile couples who have benefited from its effects, it is not without complications. These include possible immediate complications, possible intermediate complications (during pregnancy) and possible long-term complications. Evidence shows that most of these complications are related to the woman’s infertility status and/or increased incidence of multiple pregnancies.

OHSS and multiple pregnancies are the two most important immediate complications and can be prevented by proper measures. Besides the stress and anxiety associated with infertility, clomiphene citrate *per-se* has been rarely blamed for mood swings and psychotic illnesses. Other rare immediate complications include adnexal torsion and massive ovarian oedema. Regression analyses have also revealed that fertility drugs are risk factors for ectopic pregnancy as well as preterm birth.

Fertility drugs were also found to be risk factors for PET in patients treated with IVF but not IUI or ovulation induction. Clomiphene and letrozole are associated with a slight decrease in birth weight and a slight increase in congenital anomalies but there is no evidence that letrozole increases the risk of congenital anomalies compared to clomiphene citrate. IVF singleton babies have a higher incidence of perinatal mortality, preterm delivery, LBW, VLBW and for being SGA, but this is not necessarily related to the medication used.

Finally, a small study based on a mailed questionnaire found that fertility drugs were associated with an early menopause (by 3.5 years) but more studies are needed to confirm this finding. There is no evidence to suggest a direct cause relationship between ovarian stimulation and cancer regardless of the number of treatment cycles or the type of fertility drugs used. The slightly elevated risk of uterine cancer reported in some studies may be because of the women’s characteristics including their infertility status.