



## P81. MIRACLES DO HAPPEN: A CASE REPORT OF SUCCESSFUL IVF PREGNANCY AFTER A VERY LOW EARLY MATERNAL SERUM BETA-HUMAN CHORIONIC GONADOTROPHIN LEVELS.

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There are departmental protocols and studies available on predictive value of early maternal serum beta-human chorionic gonadotrophin (beta HCG) for the successful outcome in women undergoing in vitro fertilization. We follow a protocol in our department whereby initial maternal beta HCG level of 50 IU/L and above has good predictive value.

### Case description,

We report a case where a healthy, full term baby boy was born after a very low initial beta-human chorionic gonadotrophin level following a frozen embryo transfer. Patient was 35 years of age at time of FET (Frozen embryo transfer) and it was a natural thaw cycle. She had a day 5 embryo transferred that was 1BA in quality. It was an elective single embryo transfer. Maternal serum Beta HCG level was measured 9 days after embryo transfer and it was 7 IU/L. A level of less than 2 IU/L is taken as negative. Repeat blood test was done after a week as per protocol and it revealed a level of 459 IU/L. Transvaginal ultrasound scan was carried out at 5 weeks of pregnancy and intrauterine gestational sac was seen. There was no adenexal mass or free fluid seen in pouch of douglas. Yolk sac and fetal heart beat was seen at transvaginal ultrasound scan at 6 weeks of pregnancy. She was discharged from IVF clinic after a pregnancy scan at 7 weeks of gestation that confirmed viable intrauterine pregnancy. She went onto have an uneventful pregnancy and delivery.

### Discussion,

Human chorionic gonadotrophin is a glycoprotein produced by the trophoblastic tissue. It is detectable in maternal serum within a few days of implantation. Literature points to wide variability in predictive value of maternal serum HCG in success of in vitro fertilization. Most of studies quote a value of beta HCG of above 50 IU/L associated with ongoing pregnancy. Each IVF unit has protocol of managing patients with low levels of maternal beta human chorionic gonadotrophin.

### Conclusion,

Patients with low levels of maternal serum beta HCG ( less than 10 IU/L) 14 days after egg collection or embryo transfer should be given an opportunity of repeat blood test to quantify the beta HCG. Early

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ultrasound scan should be offered to localize the pregnancy.