Successful pregnancy with very low ovarian reserve with controlled ovarian stimulation with urinary gonadotropins: A case report

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ABSTRACT

Introduction: Low ovarian reserve is an important factor when fertility treatment is contemplated.It makes the treatment very difficult, and the success rate is very low in such patients. Some even consider whether it is cost-effective to do fertility treatment in these kinds of patients. **Case Description:** Mrs MV, 36 years of age, married for 10 years, had undergone fertility treatments in various fertility centre. Her antimullerian hormone was very low (AMH) 0.1 pmol. She was advised for adoption or gamate donor programme by other centres. However, she was not keen on these, thus consulted us for doing a controlled ovarian stimulation (COS) on herself. The outcome of COS with very low AMH was counselled to the couple. On examination she had a huge multiloculated right ovarian cyst (20 x 25 cm), her tumour markers & CT scan were normal & did not show any malignancy signs. After proper counselling the couple agreed for a surgery. A laparoscopic right salpingooherectomy was done and she recovered well. She also had a left ovarian cystectomy in a different centre few years ago. The couple were advised for acupuncture & given some supplements as a preparation for IVF. A short antagonist protocol was planned & she was started on urinary FSH 300 iu (Folliculin) & LH 150 iu (HUMOG) from day 2 of her menses. She responded well for her low ovarian reserve. There were 2 good-sized follicles measuring 18 x 20 mm on her left ovary. Her oocyte pick-up was uneventful with 2 good oocytes. ICSI was done & there were 2 good grade embryos on day 3. The couple refused for blastocyst culture and PGT A as they were afraid there may not be any embryos left for transfer. Thus, both embryos were frozen on day 3. Subsequently, a frozen embryo was done with single embryo transfer. She was pregnant, and her antenatal period was uneventful. Her non-invasive prenatal test and anomaly scan were normal. However, she developed pregnancy-induced hypertension with gestational diabetes in the 3rd trimester. Both conditions were well controlled with medications until 36 weeks, where she developed preeclampsia and the baby (3.8 kg) was delivered via emergency caesarean section. The blood pressure was well controlled, and the mother was discharged well with the baby. Two years later, she conceived naturally and delivered another baby. **Discussion:** Ovarian reserve may begin to decrease in a woman as age increases, and it decreases rapidly after age 40. Ovarian gynaecological conditions or prior ovarian surgery also decreases reserve. Although increasing age is a risk factor for diminished ovarian reserve, age and diminished ovarian reserve are each independent predictors of infertility and thus of a poorer response to fertility treatment. However, diminished ovarian reserve does not mean that pregnancy is impossible. With proper counselling, guidance and treatment patients with very low ovarian reserve also can achieve their dreams.