

Value of Pregnancy Test in Unexpected Pregnancy in prolonged infertility

H. J. Yousuf, P. Baillie

Department of Obstetrics and Gynaecology, Baqai Medical College, Karachi.

Introduction

Unexpected pregnancy even in prolonged infertility is not uncommon.¹ This case report describes a patient with secondary infertility for 10 years who was being submitted to in vitro fertilization (IVF), but was diagnosed to be pregnant during the early stages of this process thereby emphasizing the importance of excluding pregnancy during the reproductive years.

Case Report

A 32 year old female presented with a history of 2 miscarriages at 6 weeks of pregnancy followed by 10 years of infertility. A bilateral wedge resection for polycystic ovaries had been carried out 8 years ago and had resulted in regular periods. A post-surgical laparoscopy revealed a blocked left tube and a tortuous right tube with multiple adhesions, which were partially freed. An unsuccessful ICSI (Intra Cytoplasmic Sperm Injection) treatment cycle had been carried out elsewhere. General and pelvic examinations revealed no abnormality.

Semen analysis of her husband showed a total count of 915 million, the morphology showing 45% normal forms and a motility of 70 percent (61% rapid linear progression).

Special tests revealed positive anti-nuclear antibodies and anti-phospholipid antibody IgM levels of 15.6 m.i.u. per litre. Dispirin 75mg daily resulted in normalization on re-testing.

The process of in vitro fertilization was started with gonadotrophin releasing hormone agonist (GnRH_a) on day 21 of the cycle. No period resulted and a plasma β HCG on day 30 was 153 iu/litre, diagnostic of pregnancy. The IVF cycle was stopped. The pregnancy progressed uneventfully and a normal male baby weighing 6 pounds 9 ounces was delivered by caesarean section for failure to progress in labour at 39 weeks of gestation.

Discussion

The importance of this patient lies in the exclusion of pregnancy for all females of childbearing age no matter how unlikely², prior to further management or treatment. Clinical suspicion should be present, especially taking a careful menstrual history, and this should be confirmed, particularly in the early stages when pelvic examination is inconclusive and ultrasound not diagnostic.

Confirmation of pregnancy is usually carried out by means of a urinary immunological pregnancy test. These are designed to detect a pregnancy within 3 days of delayed menstruation. Nevertheless, false positive results are due to improperly stored test kits, marked proteinuria and contamination with a vaginal discharge. False negative results can also occur with dilute urine (S.G. <1.015) and drug interactions.

More reliable results are obtained by measuring serum β HCG, although even this is not absolute due to variation in standards.³

The occurrence of pregnancy coinciding with luteal use of a gonadotrophin releasing hormone agonist for down regulation of ovarian function prior to in-vitro fertilization is noteworthy because of the prolonged infertility. It is plausible that the early flare of increased gonadotrophins (mainly LH)⁴ may have improved luteal function and hence assisted in continuation of pregnancy.^{5,6}

References

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