PREGNANCY BY TREATMENT FOR GRAVES DISEASE IN A PATIENT WITH PRIMARY OVARIAN FAILURE

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Introduction

- Premature ovarian failure (POF) is a disorder associated with female infertility, and it affects approximately 1% of women under the age of 40 years. It is considered a multifactorial, heterogeneous condition, for which the exact underlying cause remains unclear. Associations with autoimmune diseases, environmental factors and genetic causes have been described. Herein we presented a case with POF who regained fertility after the treatment of Graves disease.

Case: A 29-year-old nulligravida woman with amenorrhea for six years was referred to our clinic for the treatment of hyperthyroidism. She had been followed by gynecology clinics with the diagnosis of POF and received hormone replacement therapy before application to our clinic. Her follicle stimulating hormone, luteinizing hormone, estradiol checked in her last visit before the referral were; 107.3 mIU/mL, 63.5 mIU/mL and 10.41 pg/mL, respectively. Her karyotype was 46, XX. New blood test revealed a thyroid stimulating hormone of 0.017 uIU/mL (normal, 2.0-4.4), free thyroxin of 4.29 ng/dL (normal, 0.9-1.7), free triiodothyronine of 13.66 pg/mL (normal, 0.27-4.2) and thyroid stimulating antibody level of 44.49 u/L (normal, 0-14). On ultrasound, the thyroid was diffusely enlarged with coarse heterogeneous echogenity. A diagnosis of Graves's disease was made and methimazole was started 15 mg once daily. The dosage was adjusted accordingly and she had used methimazole for 13 months and was euthyroid when the pregnancy was determined.

Conclusion: Numerous case reports and certain observational and interventional studies have reported spontaneous pregnancies and ovulation in POF patients. Some authors suggested the possible effects of immuno-modulating therapy on the resumption of ovarian function and fertility in a selected group of POF patients. Anti-thyroid drugs may have clinically important immunosuppressive effects. To our knowledge, this is the first case in the literature who had POF and Graves disease and got pregnant upon anti-thyroid drug treatment.