中文題目:治療睪固酮相關男性不孕症的抉擇—病例報告 英文題目: A novel selection to treat testosterone related male infertility - a case report 作 者:謝宜廷¹,王舜禾² 服務單位:¹台北市立聯合醫院仁愛院區內科部,²台北市立聯合醫院仁愛院區新陳代謝科

Introduction

Androgen replacement therapy has been shown to be safe and effective for men with testosterone deficiency related erectile dysfunction. However, testosterone supplement may result in male infertility due to Gonadotropin-releasing hormone (GnRH) axis suppression, and ceasing testosterone supplement was the first choice to reboot the sperm production. That way, it is in a dilemma to keep testosterone treatment or not in these patients.

Case presentation

Here we present a 56-year-old man suffered poor libido and severe erectile dysfunction. He was diagnosed as prolactinoma and treated with cabergoline. Despite great improvement in prolactin level, his erectile dysfunction persisted. Due to suspected late onset hypogonadism, testosterone replacement therapy was prescribed and his erectile function improved successfully. Nevertheless, he then expected one more child after the sex function recovering, but he refused to hold testosterone supplement in order to maintaining his sex ability. In that way, what can we do more?

Discussion

Exogenous testosterone reduces endogenous testosterone production by negative feedback on the hypothalamic-pituitary-gonadal axis. Clomiphene citrate is a selective estrogen receptor modulator. It can bind to estrogen receptors and decrease the negative feedback of hypothalamus and pituitary gland from estrogen. Through this mechanism, clomiphene can stimulate the HPG axis and further increase the level of luteinizing hormone (LH) and follicle stimulating hormone (FSH). Increasing LH and FSH increases both testosterone production as well as spermatogenesis, respectively.

Conclusion

Clomiphene citrate seemed to be a safe and effective choice in treatment of hypogonadism in men. Its ability to restore spermatogenesis was also remarkable. However, more studies are needed in the future to establish its role in male late onset hypogonadism and infertility.