

Current Understanding of Male Reproductive Endocrinology

Hala Gomaa*

Received: February 14, 2021, **Accepted:** February 29, 2021, **Published:** March 20, 2021

Hala Gomaa, Professor, Department of Obstetrics and Gynecology, University of Toronto, Toronto, Canada

Infertility affects nearly 80 million people on world-wide basis. In the last two decades medical science has progressed making great strides in prevention, diagnosis as well as medical and surgical treatment of infertility in both men and women.

The Journal of reproductive endocrinology and infertility publishes peer-reviewed articles on reproductive and gynecological disorders and medical conditions related to conception, early pregnancy and menopause. The journal focuses on advancements made in treatment of infertility, pelvic pain, ectopic pregnancy, premenstrual syndrome, and osteoporosis and covers wide range of associated topics ranging from normal menstrual cycle and pubertal development to severe pathological conditions and infertility management including assisted reproductive technology and alternative medicine. The Journal aims to present the latest innovations, insightful interpretations in concise, evidence based and authoritative manner. The specific topics that are dealt with also include anatomic and ovulatory factors, recurrent miscarriages and hormonal imbalances.

This communication is focused on male infertility and hormonal treatment approach. Loss of male testosterone synthesis or spermatogenesis lead to male infertility which is also termed as male hypogonadism. These disorders can be congenital or can be acquired disorders. In primary hypogonadism, the serum testosterone concentrations are lowered leading to impaired spermatogenesis. Primary hypogonadism can be caused due to congenital factors such as Klinefelter syndrome, Y-chromosome micro deletions, myotonic dystrophy, cryptorchidism, Noonan's syndrome. Other external factors include orchitis, mumps, varicocele and gonadotoxins. The secondary hypogonadism refers to low serum testosterone and reduced spermatogenesis along with abnormally low concentrations of gonadotropins. Secondary hypogonadism can result from congenital factors

***Corresponding author:**

Hala Gomaa

✉ gomhala_12@gmail.com

Hala Gomaa, Professor, Department of Obstetrics and Gynecology, University of Toronto, Toronto, Canada

Citation: Gomaa H (2021) Current Understanding of Male Reproductive Endocrinology. J Rep Endo Infert. Vol.6 No.2:12.

such as Kallmans syndrome, Prader-Willis syndrome, hereditary haemochromatosis and other acquired disorders such as obesity, smoking, anabolic steroid use, increased glucocorticoid levels, hyperthyroidism, hyperprolactinaemia. Hormonal treatment of male infertility is based on this understanding. In general the hypothalamic pituitary gonadal axis plays direct and significant role in male infertility. Hypothalamus secretes gonadotrophin releasing hormone that reaches the anterior pituitary gland resulting in secretion of follicle-stimulating hormone and luteinizing hormone, adrenocorticotropin, growth hormone, prolactin, and thyroid-stimulating hormone. These hormones in turn lead to secretion of testosterone having substantial role in male fertility. These hormonal imbalances can affect male fertility. Male infertility treatment depends a great deal on better and precise interpretation of these physiological aspects related to male reproductive endocrinology.