



Labsmart Software Sample Letterhead

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Age / Sex : 28 YRS / M
Referred by : Dr. Sachin Patil (MBBS)
Reg. no. : 1097



1097

Registered on : 19/11/2024 05:40 PM
Collected on : 19/11/2024
Received on : 19/11/2024
Reported on : 19/11/2024 05:40 PM

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**SEROLOGY & IMMUNOLOGY**

TEST	VALUE	UNIT	REFERENCE
TESTOSTERONE TOTAL	222	ng/dl	

Physiological basis

Testosterone is the principal male sex hormone, produced by the Leydig cells of the testes. Dehydroepiandrosterone (DHEA) is produced in the adrenal cortex, testes, and ovaries and is the main precursor for serum testosterone in women. In normal males after puberty, the testosterone level is twice as high as all androgens in females. In serum, it is largely bound to albumin (38%) and to a specific steroid hormone-binding globulin (SHBG) (60%), but it is the free hormone (2%) that is physiologically active. The total testosterone level measures both bound and free testosterone in the serum (by immunoassay). Free or bioavailable testosterone may be calculated or measured.

Interpretation

Increased in: Idiopathic sexual precocity (in boys, levels may be in adult range), adrenal hyperplasia (boys), adrenocortical tumors, trophoblastic disease during pregnancy, idiopathic hirsutism, virilizing ovarian tumors, arrhenoblastoma, virilizing luteoma, testicular feminization (normal or moderately elevated), cirrhosis (through increased SHBG), hyperthyroidism. Drugs: anticonvulsants, barbiturates, estrogens, oral contraceptives (through increased SHBG).

Decreased in: Hypogonadism (primary and secondary, orchidectomy, Klinefelter syndrome, uremia, hemodialysis, hepatic insufficiency, ethanol [men]). Drugs: digoxin, spironolactone, acarbose.

Comments

The diagnosis of male hypogonadism is based on clinical symptoms and signs plus laboratory confirmation of low AM total serum testosterone levels on two different occasions. Levels <3.0 ng/mL should be treated. Free testosterone should be measured in symptomatic patients with normal total testosterone levels. Obtain serum luteinizing hormone and FSH levels to distinguish between primary (hypergonadotropic) and secondary (hypogonadotropic) hypogonadism. Hypogonadism associated with aging (andropause) may present a mixed picture, with low testosterone levels and low to low-normal gonadotropin levels. In men, there is a diurnal variation in serum testosterone with a 20% elevation in levels in the evenings.

~~~ End of report ~~~

Mr. Sachin Sharma  
DMLT, Lab Incharge

Dr. A. K. Asthana  
MBBS, MD Pathologist

NOT VALID FOR MEDICO LEGAL PURPOSE

Work timings: Monday to Sunday, 8 am to 8 pm

Please correlate clinically. Although the test results are checked thoroughly, in case of any unexpected test results which could be due to machine error or typing error or any other reason please contact the lab immediately for a free evaluation.