Pathkind Labs

Client

Gurugram

Pathkind Diagnostics Pvt. Ltd.

Plot No. 55-56, Udhyog Vihar Ph-IV, Gurugram - 122015

Processed By

Pathkind Diagnostics Pvt. Ltd.

Plot No. 55-56, Udhyog Vihar Ph-IV, Gurugram - 122015

Name	:	**Mr. SP685**	Billing Date	:	07/07/2023 12:33:04
Age	:	35 Yrs	Sample Collected on	:	10/07/2023 10:01:31
Sex	:	Male	Sample Received on	:	10/07/2023 11:02:13
P. ID No.	:	P1000100012991	Report Released on	:	20/07/2023 20:32:22
Accession No	:	**10002305047**	Barcode No.	:	10002305047-02, 10002305047-01
Referring Doctor	:	Self			
Referred By	:		Ref no.	:	

Report Status - Final

Test Name	Result	Biological Ref. Interval	Unit
Hair Fall Panel Basic (Male & Female)			
Haemoglobin (Hb) *Sample: Whole Blood EDTA* *Method: Photometric measurement*	13.2	13.0 - 17.0	gm/dL
Calcium *Sample: Serum* *Method: Spectrophotometry - OCC*	9.6	8.6 - 10.0	mg/dL
TSH 3rd Generation *Sample: Serum* *Method: ECLIA*	**5.200 H**	0.270 - 4.200	µIU/mL
Phosphorus *Sample: Serum* *Method: Spectrophotometry-Phosphomolybdate Reduction*	3.6	2.6 - 4.5	mg/dL
Iron Studies **Sample: Serum** *Method: Method: Spectrophotometry-Ferrozine*			
Iron *Sample: Serum* *Method: Spectrophotometry-Ferrozine*	**25 L**	59 - 158	µg/dL
UIBC **Unsaturated Iron Binding Capacity** *Sample: Serum* *Method: Spectrophotometry*	369	110 - 370	µg/dL
Total Iron Binding Capacity (TIBC) *Sample: Serum* *Method: Calculated*	394	228 - 428	µg/dL
% Saturation *Sample: Serum* *Method: Calculated*	**6 L**	20 - 50	%
Estradiol (E2) *Sample: Serum* *Method: ECLIA*	42.20	23.80 - 60.70	pg/mL

NATIONAL REFERENCE LAB
PATHKIND DIAGNOSTICS PVT. LTD.
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care@pathkindlabs.com | www.pathkindlabs.com
Customer Care: 75000-75111

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Report Status - Final

Test Name	Result	Biological Ref. Interval	Unit
		11.4 - 43.2	
Testosterone Total *Sample: Serum* *Method: ECLIA*	6.50	2.80 - 8.00	ng/mL

TSH 3rd Generation

Clinical Significance :

TSH levels are elevated in primary hypothyroidism and low in primary hyperthyroidism. Evaluation of TSH is useful in the differential diagnosis of primary from secondary and tertiary hypothyroidism. In primary hypothyroidism, TSH levels are elevated, whil secondary and tertiary hypothyroidism, TSH levels are low or normal. High TSH level in the presence of normal FT4 is subclinical hypothyroidism and low TSH with normal FT4 is called subclinical hyperthyroidism. Sick, hospitalized patients may have falsely low or transiently elevated TSH. Significant diurnal variation is also seen in TSH levels.

Guidelines for TSH levels in pregnancy, as per American Thyroid Association, are as follows:

PREGNANCY TRIMESTER	BIOLOGICAL REFERENCE INTERVAL	UNIT
FIRST TRIMESTER	0.100 - 2.500	µIU/mL
SECOND TRIMESTER	0.200 - 3.000	µIU/mL
THIRD TRIMESTER	0.300 - 3.000	µIU/mL

Iron Studies

Iron is an essential trace mineral element which forms an important component of hemoglobin, metallocompounds and Vitamin A. Deficiency of iron, leads to microcytic hypochromic anemia. The toxic effects of iron are deposition of iron in various organs of the body and hemochromatosis.

Total Iron Binding capacity (TIBC) is a direct measure of the protein Transferrin which transports iron from the gut to storage sites in the bone marrow. In iron deficiency anemia, serum iron is reduced and TIBC increases.

Transferrin Saturation occurs in Idiopathic hemochromatosis and Transfusional hemosiderosis where no unsaturated iron binding capacity is available for iron mobilization. Similar condition is seen in congenital deficiency of Transferrin.

Estradiol (E2)

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Report Status - Final

Test Name	Result	Biological Ref. Interval	Unit

Clinical Significance :

Estradiol (E2) levels are low in hypogonadism. If low E2 levels are associated with high luteinizing hormone (LH) and follicle stimulating hormone (FSH) levels,it is indicative of primary gonadal failure. The main causes are genetic, autoimmune and toxic (eg, related to chemotherapy or radiation therapy for malignant disease). If LH/FSH levels are low or normal, it is indicative of hypogonadotrophic hypogonadism. This may be due to functional causes, such as starvation, overexercise, severe physical or emotional stress, heavy drug and/or alcohol use and due to organic disease of the hypothalamus or pituitary. Irregular or absent menstrual periods with normal or high E2 levels are seen in possible polycystic ovarian syndrome, androgen producing tumors, or estrogen producing tumors. E2 levels also change during the menstrual cycle. Levels are low Post-menses and then rise during the follicular phase to a pre-ovulatory peak, and fall in the luteal phase. Low baseline levels and a lack of rise, as well as persistent high levels without midcycle rise, are indicative of anovulatory cycles.

Testosterone Total

Clinical Significance :

Testosterone is the major androgenic hormone and is responsible for the development of the external genitalia and secondary sexual characteristics in males. It is an estrogen precursor in females, and in both genders, it has some anabolic effects and also influences behavior. High levels of testosterone during childhood leads to premature puberty in boys and masculinization in girls. Elevated levels in adult women results in varying degrees of virilization, including hirsutism, acne, oligo-amenorrhea and infertility. Mild-to-moderate testosterone elevations may be asymptomatic in males.Common causes of pronounced elevations of testosterone include congenital adrenal hyperplasia, adrenal, testicular, and ovarian tumors and abuse of testosterone or gonadotrophins by athletes.Low levels of testosterone is usually due to testicular failure in males, which can be primary, secondary or tertiary. It causes partial or complete hypogonadism and also causes some changes in the secondary sexual characteristics and the reprodictive function.In females, low levels of teststerone causes decline in libido and nonspecific mood changes.

** End of Report**

Dr. Aarti Khanna Nagpal
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Senior Consultant

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