

NAME : MRS SAROJ SINGH

Ref. By : . SELF

Address :

45 Years / Female Reg No. : 19225 Reg. Date : 05/08/2022 09:15AM

Collected At : MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	<u>UNIT</u>	BIOLOGICAL REF RANGE	TEST METHOD		
Glycosylated Hemoglobin (GHb/HBA1c)						
Sample Type	: WB - EDTA					
Glycosylated Hemoglobin (GHb/HBA1c)	: 4.7	%	4.8 - 6.0 : Non Diabetic 6.0 - 7.0 : Good Control 7.0 - 8.0 : Weak Control More than 8 : Poor Control	Biorad D10 HPLC		

Glycosylated hemoglobin (*hemoglobin A1c, HbA1c, A1C*, or *Hb1c*; sometimes also *HbA1c*) is a form of hemoglobin used primarily to identify the average plasma glucose concentration over prolonged periods of time. It is formed in a non-enzymatic pathway by hemoglobin's normal exposure to high plasma levels of glucose. Glycation of hemoglobin has been associated with cardiovascular disease, nephropathy and retinopathy in diabetes mellitus. Monitoring the HbA1c in type-1 diabetic patients may improve treatment. HbA1c is a weighted average of blood glucose levels during the preceding 120 days, which is the average life span of red blood cells. A large change in mean blood glucose can increase HbA1c levels within 1-2 weeks. Sudden changes in HbA1c may occur because recent changes in blood glucose levels in the 30 days immediately preceding blood sampling contribute 50% to the HbA1c level, whereas glucose levels in the preceding 90-120 day period contribute only 10%. Thus, it does not take 120 days to detect a clinically meaningful change in HbA1c following a significant change in mean plasma glucose level.

METHOD: Ion Exchange Chromatography High performance liquid chromatography(HPLC)

INSTRUMENT: D -10 Bio-Rad Laboratories;FRANCE



KORBA- 495677 PH-09228333 MOBILE-9300888178

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CLINICAL BIOCHEMISTRY

TEST	<u>RESULT</u>	<u>UNIT</u>	BIOLOGICAL REF RANGE	TEST METHOD
Thyroid Profile				
Sample Type	: SERUM			
Tri lodothyronine (T3)	: 1.69	ng/mL	0.6-2.7 : 1 - 10 Years 0.6-1.81 : Adults Pregnancy 0.9 - 3.0 : Ist Trimester 0.9 - 3.6 : 2nd & 3rdTr	ECL
Total Thyoxine (T4)	: 13.44	μg/dL	7.8 - 16.5 : 1 - 12 Months 4.6 - 11.6 : Adults 9.1 - 14.0 : Pregnancy (15 - 40 Weeks)	ECL
Thyroid Stimulating Hormone (TSH)	: <0.005	μIU/mL	0.52 - 16.0 : 1 - 30 Days 0.46 - 8.10 : 1 Mn - 5 Yrs 0.37 - 4.8 : Adults Cord blood : 2.3 - 13.2	ECL

Three common ways in which there may be inadequate amounts of the thyroid hormone for normal metabolism. 1. Primary hypothyroidism, in which there is a raised TSH and a low T4 and low T3. This is due to failure of the thyroid gland, possibly due to autoantibody disease, possibly due to toxic stress or possibly due to iodine deficiency. 2. The second, the most common cause of thyroid failure, occurs at the pituitary level. In this condition there is inadequate thyroid stimulating hormone (TSH) produced from the pituitary and so one tends to see low or normal TSH, low T4s and variable T3s. This condition is most common in many patients with chronic fatigue syndrome, where there is a general suppression of the hypothalamic-pituitary-adrenal axis. **3.** The third type of under-functioning is due to poor conversion of T4 to T3. This requires enzymes and co-factors, in particular selenium, zinc and iron. In this condition there are normal or possibly slightly raised levels of TSH, normal levels of T4 but low levels of T3. This requires micronutrients and also T3 to correct.

Therefore, in any patient suspecting of thyroid problem routinely TSH, a Free T4 and a Free T3 are also advisable. Any patients who are taking T3 as part of their thyroid supplement need to have their T3 levels monitored as well as T4. T3 is much more quickly metabolized than T4 and blood tests should be done between 4-6 hours after their morning dose.

METHOD: One-step sandwich and competitive FEIA **INSTRUMENT: TOSHO AIA-360 JAPAN**

End Of Report ---

Dr. VANDANA CHANDANI

Checked By:duwash