

PH-09228333 MOBILE-9300888178

NAME : MRS SUSHILA TANDAN

Ref. By : . SELF

Address ·

39 Years / Female Reg No. : 10452 : 05/05/2022 05:21PM Req. Date

Collected At : MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

| TEST | <u>RESULT</u> | <u>UNIT</u> | BIOLOGICAL REF RANGE | TEST METHOD |
|-----------------------------------|---------------|-------------|--|-------------|
| Thyroid Profile | | | | |
| Sample Type | : SERUM | | | |
| Tri lodothyronine (T3) | : 1.33 | 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) | : 10.65 | 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) | : 7.79 | 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 |
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| Sample Registered On | : 05/05/2022 05:21PM | · |
| Sample Received On | :05/05/2022 05:32PM | |
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Dr. VANDANA CHANDANI