

KOS Diagnostic Lab

(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. ANJU GUPTA

AGE/ GENDER : 34 YRS/FEMALE **PATIENT ID** : 1630869

COLLECTED BY : SURJESH REG. NO./LAB NO. :012410010033

REFERRED BY **REGISTRATION DATE** : 01/Oct/2024 09:13 AM BARCODE NO. **COLLECTION DATE** : 01/Oct/2024 09:19AM :01518103 CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 01/Oct/2024 04:32PM

CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Unit **Biological Reference interval** Test Name Value

ENDOCRINOLOGY

THYROID FUNCTION TEST: FREE

FREE TRIIODOTHYRONINE (FT3): SERUM 3.18 pg/mL 1.60 - 3.90by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

FREE THYROXINE (FT4): SERUM 0.70 - 1.501.83H ng/dL

by CMIA (CHEMILUMINESCENT MICROPARTICLE

IMMUNOASSAY)

THYROID STIMULATING HORMONE (TSH): SERUM 0.35 - 5.500.181^L μIU/mL

by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

3rd GENERATION, ULTRASENSITIVE

INTERPREATION:

- 1. FT3 & FT4 are metabolic active form of thyroid harmones and correlate much better with clinical condition of the patient as compared to Total T4 levels. High FT3 & FT4 with normal TSH Levels and abnormal thyroid function (Total Thyroid) can occasionally be seen in cases of PERIPHERAL THYROID HARMONE RESISTANCE
- 2. TSH levels are subjected to circardian variation, reaching peak levels between 2-4 a.m and at a minimum between 6-10 pm. The variation is of the order of 50 %. Hence time of the day has influence on the measured serum TSH concentration.

INCREASED TSH LEVELS:

- 1. Primary hypothyroidism is accompanied by depressed serum FT3 & FT4 values and elevated serum TSH levels. Primary or untreated hypothyroidism may vary from 3 times to more than 100 times normal depending upon degree of hypofunction.
- 2. Hypothyroid patients receiving insufficient thyroid replacement therapy.
- 3. Hashimotos thyroiditis
- 4. DRUGS: Amphetamines, idonie containing agents & dopamine antagonist. 5. Neonatal period, increase in 1st 2-3 days of life due to post-natal surge

DECREASED TSH LEVELS:

- 1. Primary hyperthyroidism is accompanied by elevated serum FT3 & FT4 values along with depressed TSH levels.
- Toxic multi-nodular goitre & Thyroiditis.
 Over replacement of thyroid hormone in treatment of hypothyroidism
- Autonomously functioning Thyroid adenoma
- 4. Secondary pituatary or hypothalmic hypothyroidism
- 5. Acute psychiatric illness
- Severe dehydration.
- DRUGS: Glúcocorticoids, Dopamine, Levodopa, T4 replacement therapy, Anti-thyroid drugs for thyrotoxicosis.
- 8. Pregnancy: 1st Trimester

NOTE:

1. High FT3 levels accompanied by normal FT4 levels and depressed TSH levels may be seen T3 thyrotoxicosis, central hypothyroidism occurs due to pituitary or thalamic malfunction

2. Secondary & Tertiary hypothyroidism, this relatively rare but important condition is indicated by presence of low serum FT3 and FT4 levels, in conjugation with TSH levels that are paradoxically either low/normal or are not elevated to levels that are expected.

*** End Of Report ***



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