



# P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

**A PIONEER DIAGNOSTIC CENTRE**

☎ 0171-2532620, 8222896961 ✉ pkrjainhealthcare@gmail.com

**NAME** : Mrs. DEEVIKA RANA  
**AGE/ GENDER** : 37 YRS/FEMALE  
**COLLECTED BY** :  
**REFERRED BY** :  
**BARCODE NO.** : 12506710  
**CLIENT CODE.** : P.K.R JAIN HEALTHCARE INSTITUTE  
**CLIENT ADDRESS** : NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA

**PATIENT ID** : 1561128  
**REG. NO./LAB NO.** : 122501270014  
**REGISTRATION DATE** : 27/Jan/2025 10:58 AM  
**COLLECTION DATE** : 27/Jan/2025 11:03AM  
**REPORTING DATE** : 27/Jan/2025 08:10PM

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|

## HAEMATOLOGY

### GLYCOSYLATED HAEMOGLOBIN (HbA1C)

GLYCOSYLATED HAEMOGLOBIN (HbA1c): **7.8<sup>H</sup>** % 4.0 - 6.4  
WHOLE BLOOD  
by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)  
ESTIMATED AVERAGE PLASMA GLUCOSE **177.16<sup>H</sup>** mg/dL 60.00 - 140.00  
by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)

#### INTERPRETATION:

| AS PER AMERICAN DIABETES ASSOCIATION (ADA): |                                      |
|---|--------------------------------------|
| REFERENCE GROUP                             | GLYCOSYLATED HEMOGLOBIN (HbA1C) in % |
| Non diabetic Adults >= 18 years             | <5.7                                 |
| At Risk (Prediabetes)                       | 5.7 – 6.4                            |
| Diagnosing Diabetes                         | >= 6.5                               |
| Therapeutic goals for glycemic control      | Age > 19 Years                       |
|   | Goals of Therapy:                    |
|   | Actions Suggested:                   |
|   | Age < 19 Years                       |
|   | Goal of therapy:                     |

#### COMMENTS:

- Glycosylated hemoglobin (HbA1c) test is three monthly monitoring done to assess compliance with therapeutic regimen in diabetic patients.
  - Since Hb1c reflects long term fluctuations in blood glucose concentration, a diabetic patient who has recently under good control may still have high concentration of HbA1c. Converse is true for a diabetic previously under good control but now poorly controlled.
  - Target goals of < 7.0 % may be beneficial in patients with short duration of diabetes, long life expectancy and no significant cardiovascular disease. In patients with significant complications of diabetes, limited life expectancy or extensive co-morbid conditions, targeting a goal of < 7.0% may not be appropriate.
  - High
- HbA1c (>9.0 -9.5 %) is strongly associated with risk of development and rapid progression of microvascular and nerve complications
- 5.Any condition that shorten RBC life span like acute blood loss, hemolytic anemia falsely lower HbA1c results.
- 6.HbA1c results from patients with HbSS,HbSC and HbD must be interpreted with caution , given the pathological processes including anemia,increased red cell turnover, and transfusion requirement that adversely impact HbA1c as a marker of long-term glycemic control.
- 7.Specimens from patients with polycythemia or post-splenectomy may exhibit increase in HbA1c values due to a somewhat longer life span of the red cells.



  
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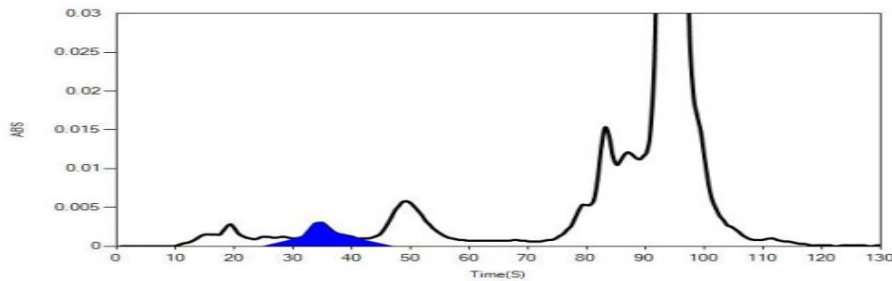
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## LIFOTRONIC Graph Report

|          |              |                                |                                 |
|----------|--------------|--------------------------------|---------------------------------|
| Name :   | Case :       | Patient Type :                 | Test Date : 27/01/2025 19:10:04 |
| Age :    | Department : | Sample Type : Whole Blood EDTA | Sample Id : 12506710            |
| Gender : |              |                                | Total Area : 6665               |

| Peak Name | Retention Time(s) | Absorbance | Area | Result (Area %) |
|-----------|-------------------|------------|------|-----------------|
| HbA0      | 69                | 1803       | 5789 | 83.1            |
| HbA1c     | 36                | 58         | 545  | 7.8             |
| La1c      | 25                | 30         | 172  | 2.5             |
| HbF       | 18                | 12         | 10   | 0.1             |
| Hba1b     | 14                | 28         | 90   | 1.3             |
| Hba1a     | 11                | 16         | 59   | 0.8             |



  
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## CLINICAL CHEMISTRY/BIOCHEMISTRY

### URIC ACID

|   |                   |       |             |
|---|-------------------|-------|-------------|
| URIC ACID: SERUM<br>by URICASE - OXIDASE PEROXIDASE | 2.29 <sup>L</sup> | mg/dL | 2.50 - 6.80 |
|---|-------------------|-------|-------------|

#### INTERPRETATION:-

1. GOUT occurs when high levels of Uric Acid in the blood cause crystals to form & accumulate around a joint.  
2. Uric Acid is the end product of purine metabolism. Uric acid is excreted to a large degree by the kidneys and to a smaller degree in the intestinal tract by microbial degradation.

#### INCREASED:-

##### (A).DUE TO INCREASED PRODUCTION:-

1. Idiopathic primary gout.
2. Excessive dietary purines (organ meats, legumes, anchovies, etc).
3. Cytolytic treatment of malignancies especially leukemias & lymphomas.
4. Polycythemia vera & myeloid metaplasia.
5. Psoriasis.
6. Sickle cell anaemia etc.

##### (B).DUE TO DECREASED EXCRETION (BY KIDNEYS)

1. Alcohol ingestion.
2. Thiazide diuretics.
3. Lactic acidosis.
4. Aspirin ingestion (less than 2 grams per day).
5. Diabetic ketoacidosis or starvation.
6. Renal failure due to any cause etc.

#### DECREASED:-


##### (A).DUE TO DIETARY DEFICIENCY


1. Dietary deficiency of Zinc, Iron and molybdenum.
2. Fanconi syndrome & Wilson's disease.
3. Multiple sclerosis.
4. Syndrome of inappropriate antidiuretic hormone (SIADH) secretion & low purine diet etc.

##### (B).DUE TO INCREASED EXCRETION

1. Drugs:- Probenecid, sulfinpyrazone, aspirin doses (more than 4 grams per day), corticosteroids and ACTH, anti-coagulants and estrogens etc.



  
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## ENDOCRINOLOGY

### THYROID STIMULATING HORMONE (TSH)

THYROID STIMULATING HORMONE (TSH): SERUM 2.31  $\mu$ IU/mL 0.35 - 5.50

by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

3rd GENERATION, ULTRASENSITIVE

#### INTERPRETATION:

| AGE                 | REFERENCE RANGE ( $\mu$ IU/mL) |
|---------------------|--------------------------------|
| 0 – 5 DAYS          | 0.70 – 15.20                   |
| 6 Days – 2 Months   | 0.70 – 11.00                   |
| 3 – 11 Months       | 0.70 – 8.40                    |
| 1 – 5 Years         | 0.70 – 7.00                    |
| 6 – 10 Years        | 0.60 – 5.50                    |
| 11 - 15             | 0.50 – 5.50                    |
| > 20 Years (Adults) | 0.27 – 5.50                    |
| PREGNANCY           |                                |
| 1st Trimester       | 0.10 - 3.00                    |
| 2nd Trimester       | 0.20 - 3.00                    |
| 3rd Trimester       | 0.30 - 4.10                    |

**NOTE:-** TSH levels are subjected to circadian 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.

**USE:-** TSH controls biosynthesis and release of thyroid hormones T4 & T3. It is a sensitive measure of thyroid function, especially useful in early or subclinical hypothyroidism, before the patient develops any clinical findings or goitre or any other thyroid function abnormality.

#### INCREASED LEVELS:

- 1.Primary or untreated hypothyroidism, may vary from 3 times to more than 100 times normal depending on degree of hypofunction.
- 2.Hypothyroid patients receiving insufficient thyroid replacement therapy.
- 3.Hashimotos thyroiditis.
- 4.DRUGS: Amphetamines, Iodine containing agents and dopamine antagonist.
- 5.Neonatal period, increase in 1st 2-3 days of life due to post-natal surge.

#### DECREASED LEVELS:

- 1.Toxic multi-nodular goitre & Thyroiditis.
- 2.Over replacement of thyroid hormone in treatment of hypothyroidism.
- 3.Autonomously functioning Thyroid adenoma
- 4.Secondary pituitary or hypothalamic hypothyroidism
- 5.Acute psychiatric illness
- 6.Severe dehydration.
- 7.DRUGS: Glucocorticoids, Dopamine, Levodopa, T4 replacement therapy, Anti-thyroid drugs for thyrotoxicosis.



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8.Pregnancy: 1st and 2nd Trimester

**LIMITATIONS:**

- 1.TSH may be normal in central hypothyroidism, recent rapid correction of hyperthyroidism or hypothyroidism, pregnancy, phenytoin therapy.
- 2.Autoimmune disorders may produce spurious results.

\*\*\* End Of Report \*\*\*



  
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