Table 1: Laboratory Investigations which included hematological, biochemical, peripheral blood smear, and metabolic tests

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| S.no | Laboratory Investigations | Findings | References |
|  | **Hematology** |  |  |
| 1 | WBC | 17,400 | 4000-11000 /cmm |
| 2 | DLC |  |  |
|  | Neutrophils | 59 | 45-75% |
|  | Lymphocytes | 30 | 25-45% |
|  | Monocytes | 10 | 2-10% |
|  | Eosinophils | 01 | 1-6% |
|  | Basophils | 00 | 0-1% |
| 3 | Hemoglobin | 8.8gm% |  |
| 4 | PCV | 24.2 % |  |
| 5 | RBC | 2.96 million/ |  |
| 6 | Platelets | 2,23,000 | 150000-450000 /cumm |
| 7 | MCV | 82 | 82-92 fl |
| 8 | MCH | 29.8 | 27-32 pg |
| 9  10 | MCHC  RDW – CV | 36.5  12 | 32-36 %  % |
|  | **Biochemistry** |  |  |
| 11 | Urea | 2.3 | 1.8-6.4 mmol/L |
| 12 | Creatinine | 25 | 35-60 Mol/L |
| 13 | Sodium | 145 | 135-146 mEq/L |
| 14  15 | Potassium  CRP Quantitative | 4.3  13.83 | 3.5-5.2 mEq/L  0-6 mg/L |
| 16 | Total Bilirubin | 4 |  |
| 17 | Direct Bilirubin | 1 | <4 Mol/L |
| 18 | SGPT/ALT | 19 U/L |  |
| 19 | SGOT/AST | 37 U/L |  |
| 20 | Albumin | 38 | 28-44 gm/l |
| 21 | LDH | 435 | 180-430 U/L |
| 22 | Calcium | 2.4 | 2.25 - 2.75 mmol/L |
| 23 | Homocysteine | 2.22 mol/L |  |
| 24 | Free thyroxine (T4) | 16.95 | 9.0-19.0 pmol/L |
| 25 | TSH | 2.489 | 0.35-4.94 uIU/ml |
| 26 | Iron | 7.5 g/dl |  |
| 27 | TIBC | 224 | 200-400 g/dl |
| 28 | Ferritin | 187 | 21.8-274.6 ng/ml |

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| S.no. | Laboratory Investigations | Findings |
|  | **Peripheral Blood Smear** |  |
| 1 | RBC | Aniso poikilocytosis, Microcytic hypochromic RBCs with elliptocytes and target cells |
| 2 | WBC | Within normal limit. Reactive lymphocytes seen. Atypical cells are not seen. |
| 3 | Platelets | Adequate in the smear examined |
| 4 | Parasites | Not seen |
| 5 | Sickle cell | Not seen |

**Metabolic Test**

**Sample: Urine**

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| --- | --- | --- |
| Tests Performed | For Metabolites/Substance | Result |
| Watson-Schwartz test | Porphobilinogen | Negative |
| Benedict’s test | Reducing Sugar | Negative |
| Ninhydrin test (0.2%) | Alpha Amino Acids | Negative |
| Xanthoproteic test | Aromatic Amino Acids | Negative |
| Millon’s test | Tyrosine | Negative |
| Dinitrophenylhydrazine test | Branched chain amino acids | Negative |
| Ferric Chloride test | Aromatic/Phenol containing amino acids | Negative |