

Blood Report for Smith (Diagnosed with Fatty Liver)

Patient Name: Smith

Age: 45

Gender: Male

Date of Examination: 21st September 2024

Referring Physician: Dr. John Doe

Clinical History:

Patient presents with a history of fatigue, mild abdominal discomfort, and was diagnosed with non-alcoholic fatty liver disease (NAFLD) based on imaging studies. No significant history of alcohol consumption or viral hepatitis.

Blood Test Results:

1. Liver Function Tests (LFTs):

- **Alanine Aminotransferase (ALT):** 85 U/L (Normal range: 7–56 U/L)
 - Elevated, consistent with liver inflammation due to fatty liver.
- **Aspartate Aminotransferase (AST):** 60 U/L (Normal range: 10–40 U/L)
 - Mildly elevated, which is typical in NAFLD.
- **Alkaline Phosphatase (ALP):** 130 U/L (Normal range: 44–147 U/L)
 - Within normal limits, but borderline high.
- **Gamma-Glutamyl Transferase (GGT):** 65 U/L (Normal range: 9–48 U/L)
 - Elevated, indicating liver stress often associated with fatty liver.
- **Total Bilirubin:** 0.9 mg/dL (Normal range: 0.1–1.2 mg/dL)
 - Within normal limits, not suggestive of severe liver dysfunction.

2. Lipid Profile:

- **Total Cholesterol:** 240 mg/dL (Normal range: <200 mg/dL)
 - High, indicating dyslipidemia commonly seen in fatty liver disease.
- **Low-Density Lipoprotein (LDL):** 160 mg/dL (Normal range: <100 mg/dL)
 - Elevated, a risk factor for cardiovascular disease.
- **High-Density Lipoprotein (HDL):** 38 mg/dL (Normal range: >40 mg/dL)
 - Low, which can contribute to metabolic syndrome.
- **Triglycerides:** 220 mg/dL (Normal range: <150 mg/dL)
 - Elevated, a common finding in NAFLD and metabolic disorders.

3. Fasting Blood Glucose: 110 mg/dL (Normal range: 70–99 mg/dL)

- Elevated, indicative of impaired fasting glucose or prediabetes.

4. Hemoglobin A1c (HbA1c): 6.1% (Normal range: 4%–5.6%)

- Elevated, suggesting prediabetes and an increased risk for Type 2 diabetes, often associated with NAFLD.

5. C-Reactive Protein (CRP): 5 mg/L (Normal range: <3 mg/L)

- Elevated, a marker of inflammation which may be associated with fatty liver disease.

6. Insulin: 22 µIU/mL (Normal range: 2.6–24.9 µIU/mL)

- High, indicating insulin resistance, a common feature of NAFLD.
- 7. **Serum Albumin:** 4.1 g/dL (Normal range: 3.5–5.0 g/dL)
 - Within normal limits, suggesting that the liver's protein production capacity is still adequate.
- 8. **Prothrombin Time (PT)/International Normalized Ratio (INR):**
 - **PT:** 12.5 seconds (Normal range: 11–13.5 seconds)
 - **INR:** 1.0 (Normal range: 0.8–1.1)
 - Normal coagulation profile, indicating no significant liver impairment at this stage.
- 9. **Serum Ferritin:** 320 ng/mL (Normal range: 12–300 ng/mL)
 - Elevated, suggesting possible inflammation or iron overload, which can occur in fatty liver disease.
- 10. **Thyroid-Stimulating Hormone (TSH):** 2.8 mIU/L (Normal range: 0.4–4.0 mIU/L)
 - Within normal limits, ruling out hypothyroidism as a contributing factor.