| | | | |
|---|---|---|---|
| Patient Name | : | Bill Date | : |
| DOB/Age/Gender | : | Sample Collected | : |
| Patient ID / UHID | : | Sample Received | : |
| Referred By | : | Report Date | : |
| Sample Type | : | Barcode No | : |
| Client | : | Report Status | : |

| Test Description | Value(s) | Unit(s) | Reference Range |
|---|---|---|---|

## BIOCHEMISTRY REPORT

### D3 Hydroxybutyrate (Ketone Body)

| | | | |
|---|---|---|---|
| KETONE BODY (BETA HYDROXYBUTYRATE) | **1.95** | mmol/L | 0.03 - 0.3 |

Method : Kinetic enzymatic

**Result Rechecked,Please correlate clinically .**

**Interpretation:**

**Comment**

The Three main Ketone Bodies are : Acetone, Acetoacetate & Beta-hydroxybutyrate. Excessive formation of ketone bodies results in increased blood concentrations (ketonemia) and increased excretion in the urine (ketonuria). This process is observed in conditions associated with reduced availability of carbohydrates (such as starvation or frequent vomiting) or decreased use of carbohydrates (such as diabetes mellitus, glycogen storage disease type I [von Gierke disease], and alkalosis). The popular high-fat, low-carbohydrate diets are ketogenic and increase ketone bodies in the circulation. Diabetes mellitus and alcohol consumption are the most common causes of ketoacidosis in adults.

Beta-Hydroxybutyrate is the most predominant ketone present during Ketoacidosis. Presence of concomitant hyperglycemia is suggestive of Diabetic Ketoacidosis (DKA), while the absence of hyperglycemia may suggest the possibility of alcoholic ketoacidosis (AKA).

**Usage**

1. Monitoring therapy for Diabetic ketoacidosis

2. In the differential diagnosis of hyperglycemia, acidosis, suspected alcohol ingestion, or an unexplained increase in the anion gap

3. In pediatric patients, the presence or absence of ketonemia/uria is an essential component in the differential diagnosis of inborn errors of metabolism

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