

KOS Diagnostic Lab

(A Unit of KOS Healthcare)



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

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: 01/Sep/2024 05:29PM

NAME : Mr. RAM CHANDER

AGE/ GENDER : 45 YRS/MALE **PATIENT ID** : 1598702

COLLECTED BY REG. NO./LAB NO. : 012409010055

REFERRED BY : CIVIL HOSPITAL (AMBALA CANTT) **REGISTRATION DATE** : 01/Sep/2024 04:26 PM BARCODE NO. **COLLECTION DATE** : 01/Sep/2024 04:36PM : 01516126

: KOS DIAGNOSTIC LAB **CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit **Biological Reference interval**

CLINICAL CHEMISTRY/BIOCHEMISTRY CREATININE PHOSPHOKINASE-MB (CPK-MB)

REPORTING DATE

CPK-MB - SERUM 2.78 ng/mL 0.0 - 5.0

by EFIA (ENZYM FLUORESCENT IMMUNOASSAY)

Interpretation:-

CLIENT CODE.

1. Alternative name of Creatine Kinase (CK) is Creatine phospho-kinase (CPK).

- 2. Creatine Kinase (CK) is a dimeric enzyme composed of two types of monomer sib-units (i.e. M-Muscular & B-Brain), which combine to form three distict CK isoenzymes.
- a).CK-BB(CK-I), is produced primarily by brain, lungs and smooth muscles, and enters the blood only on injury to these organs like cerebrovascular accidents or pulmonary infarctions.
- b).CK-MB (CK-II), is produced primarily by heart muscle; c).CK-MM (CK-III), is produced primarily by skeletal muscle.
- 3). Normally very little CK is found circulating in the blood. Elevated levels indicate damage to either muscle or brain possibly from a myocardial infarction, muscle disease, or stroke.
- 4).CK levels are reduced in first half of pregnancy, and increased in second half of pregnancy

Increased:-

Physiological:-

- 1. Strenuous physical activity.
- 2.New Born.

Pathological:

- 1. Myocardial & pulmonary infarction
- 2. Accident and recent surgery.
- 3. Drugs:- Statins.
- 4. Convulsions & brain tumour.
- 5. Myopathies
- 6.Malignant hyperthermia
- 7. Hypothyroidism & Hyperthyroidism

5).CK-MB (CK-II) levels increase significantly 4-6 hours following a myocardial infaction and peak at around 12-24 hours after the infarct. The levels return to normal, in case of no further myocarial damage, after 24 to 48 hours. Hence the increased levels of CK-MB along with elevated levels of total CK is a good indicator of myocardial infarction.

6). For diagnosis of MI with high sensitivity and specificity, serial sampling over a period of 8 to 12 hours is required. For accurate diagnosis of myocardial infarction, CK-MB activity along with total CK should be measured. If the total CK activity is raised and CK-MB contributes mare than 6% of the total activity, then myocardial infarction is considered highly probable.

*** End Of Report **



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