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NAME	: Mr. RANBIR SINGH	PATIENT ID	: 1567350
AGE/ GENDER	: 40 YRS/MALE	REG. NO./LAB NO.	: 012408010037
COLLECTED BY	:	REGISTRATION DATE	: 01/Aug/2024 12:26 PM
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BARCODE NO.	: 01514253	REPORTING DATE	: 01/Aug/2024 02:48PM
CLIENT CODE.	: KOS DIAGNOSTIC LAB		
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
CPK-MB - SERUM <i>by EFIA (ENZYME FLUORESCENT IMMUNOASSAY)</i>	4.76	ng/mL	0.0 - 5.0

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

CPK-MB - SERUM 4.76 ng/mL 0.0 - 5.0
by EFIA (ENZYME FLUORESCENT IMMUNOASSAY)

Interpretation:-

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 sub-units (i.e. M-Muscular & B-Brain), which combine to form three distinct 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 infarction and peak at around 12-24 hours after the infarct. The levels return to normal , in case of no further myocardial 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 more than 6% of the total activity, then myocardial infarction is considered highly probable.

*** End Of Report ***



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