



Labsmart Software

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<https://www.yourlabname.in/>**Mr. Saubhik Bhaumik**

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Referred by : Dr. Sachin Patil (MBBS)
Reg. no. : 1026



1026

Registered on : 29/10/2024 01:37 PM
Collected on : 29/10/2024
Received on : 29/10/2024
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**HAEMATOLOGY**

TEST	VALUE	UNIT	REFERENCE
GLUCOSE-6-PHOSPHATE DEHYDROGENASE	16.7	g	5.5 - 20.5

Physiologic Basis

G6PD is an enzyme in the hexose monophosphate shunt that is essential in generating reduced glutathione and NADPH, which protect hemoglobin from oxidative denaturation. Inherited G6PD deficiency causes neonatal hyperbilirubinemia and chronic hemolytic anemia and exposure to oxidative stressors such as certain drugs or infection, can elicit significant acute hemolysis.

Interpretation

Increased in: Young erythrocytes (reticulocytosis)
Decreased in: G6PD deficiency

Causes of hemolysis in glucose-6- phosphate dehydrogenase deficiency

- Bacterial and viral infections
- Drugs:
 - Antimalarials: Primaquine, pamaquine
 - Antibacterials: Sulfonamides, nalidixic acid, nitrofurantoin, dapson
 - Antipyretics and analgesics
- Chemicals: Naphthalene balls

Comments

In deficient patients, hemolytic anemia can be triggered by oxidant agents: antimalarial drugs (eg, chloroquine), nalidixic acid, nitrofurantoin, dapson, phenacetin, vitamin C, and some sulfonamides. Patients from high-risk groups (eg, African American and people from the Mediterranean region) should be screened for G6PD deficiency before taking an oxidant drug. Hemolytic episodes can also occur in deficient patients who eat fava beans (favism), in patients with diabetic acidosis, and in infections. G6PD deficiency may be the cause of hemolytic disease of newborns in Asians and Mediterraneans.

G6PD activity levels may be measured as normal during an acute episode, because only non-hemolyzed young red cells are assessed. If deficiency is still suspected, assay should be repeated in 2-3 months when cells of all ages are present.

~~~ End of report ~~~

Mr. Sachin Sharma  
DMLT, Lab Incharge

Dr. A. K. Asthana  
MBBS, MD Pathologist

NOT VALID FOR MEDICO LEGAL PURPOSE

Work timings: Monday to Sunday, 8 am to 8 pm

Please correlate clinically. Although the test results are checked thoroughly, in case of any unexpected test results which could be due to machine error or typing error or any other reason please contact the lab immediately for a free evaluation.