

Carboxy Hemoglobin

General:

Biochemistry: Main causes of carbon monoxide poisoning are car emissions (“garage death”). The pathological effect of CO is based on its up to 240- times higher affinity to the binding sites of hemoglobin than O₂ itself. Due to the reversibility of this reaction the functionality of hemoglobin can be restored by respiration of CO free air or pure oxygen.

Symptoms: HbCO concentrations (< 20%): headaches, malaise, palpitation of the heart. HbCO concentrations between 20 and 60% can lead to dizziness, unconsciousness, dropping body temperature, paralysis, circulatory collapse and Cheyne-Stokes’ breathing, cherry-red appearance of blood and tissue. HbCO > 70% can lead to death.

Therapy: Inhaling CO-free air, artificial respiration if needed, no intake of central analeptics, supply of pure oxygen, antibiotic prophylaxis, normalizing circulation and body temperature, correction of acidosis.

Indication: CO poisoning, smokers

Material: 1 ml EDTA blood

Preanalytics: Send protected from light! Seal with parafilm. Stability 24 hours only.

TAT: 7-10 days*

Method: photometric

Units: %

Ref.- range: up to 2.0

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>