

## TRANSFORMING TOXICOLOGY LANDSCAPE FOR SAFER AND SUSTAINABLE TOMORROW

## **POSTER PRESENTATIONS**

## [ID-P#130] Acute Knock Down Effect & Carboxyhaemoglobinemia in Two Painters Following a Unique Occupational Exposure in a Closed Environment

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**Objective**: To describe the clinical presentation and outcomes of two patients with inhalational exposure to Methylene Chloride Gas.

Case Report: Two male painters who were working on maintenance of a water tank developed sudden onset loss of consciousness, a few minutes after a paint stripper compound was applied inside the water tank to remove old paint. There was no history of irritation of the eyes, nose, or throat, redness of the skin, rash or seizures. They were pulled out of the tank and taken to the nearby hospital in an ambulance. En route to the hospital, after about 5 minutes of being pulled out of the tank, they regained consciousness. Their vital parameters were normal and systemic examination was unremarkable. The chest was clear on auscultation. On drawing blood, a cherry red color was noticed. Inhalational poisoning was suspected as both the painters developed symptoms after possible exposure to fumes from the paint stripper. Investigations of both patients were significant for varying degrees of lactic acidosis and carboxyhemoglobinemia (13% and 10% respectively). Considering the circumstances of exposure and toxidrome of an acute knockdown effect and carboxyhemoglobinemia, a toxidromic diagnosis of Methylene Chloride poisoning was made. They were treated with high-flow oxygen supplementation and supportive care. Hyperbaric oxygen therapy was not available. Both recovered completely and were discharged in a stable clinical condition.

**Conclusions**: 1. If more than one person develops similar symptoms, while in the same environment or after similar exposure, a toxic cause should be considered. 2. Methylene chloride can cause toxicity via various mechanisms and is potentially life threatening. 3. There is an urgent need to improve occupational safety, especially in the unorganized sectors in India.