

## **Acute Methemoglobinemia with Hemolytic Anemia Following Bio-Organic Plant Nutrient Compound Exposure: A Case Report**

Mohan Kashinkunti<sup>1\*</sup>, Hemamalini. G<sup>2</sup>, B.V. Halakatti<sup>1</sup>, Smrthi Shetty<sup>3</sup>, RamyaBhat<sup>3</sup>, SonamJethi<sup>4</sup>

<sup>1</sup>Professor, Department of Medicine, SDM College of Medical Sciences and Hospital, Sattur, Dharwad-580009, Karnataka, India

<sup>2</sup>AssistantProfessor, Department of Medicine, SDM College of medical sciences and hospital, Sattur, Dharwad-580009, Karnataka, India

<sup>3</sup>Post graduate, Medicine, Department of Medicine, SDM College of medical sciences and hospital, Sattur, Dharwad-580009, Karnataka, India

<sup>4</sup>Intern, Department of Medicine, SDM College of medical sciences and hospital, Sattur, Dharwad-580009, Karnataka, India

### **\*Corresponding Author:**

**Name:** Mohan Kashinkunti

**Email:** [drmohandk@gmail.com](mailto:drmohandk@gmail.com)

---

**Abstract:** A middle aged adult male patient was referred to our hospital with complaints of pain abdomen and vomiting following consumption of bio-organic plant nutrient extract with a suicidal intent . On examination patient had pallor and cyanosis of mucus membranes. Pulse oximetry showed oxygen saturation of 52% on room air. Even with supplementation of 10L of oxygen, saturation increased to 66% and cyanosis failed to improve. Arterial blood gas analysis was normal, thus suggesting a 'saturation gap'. Methemoglobinemia was suspected based on above findings. Patient was then started on IV preparation of methylene blue , following which patient showed a dramatic improvement in saturation as monitored through pulse oximetry. On evaluation patient had signs and symptoms of hemolysis which was later confirmed through laboratory investigations. Patient eventually improved with blood transfusion and supportive treatment. Patient was discharged from hospital after 15 days without any sequelae.

**Keywords:** Bio-organic compound, Haemolytic anemia, Methemoglobinemia, Methylene blue, Saturation gap

---