

## INTRODUCTION

Indoxcarb, an oxadiazine pesticide used widely in agricultural setting blocks sodium channels in insects nervous system. This is a case report highlighting presentation of acquired methaemoglobinaemia in adult after ingesting pesticide which can be managed successfully with early recognition and prompt definitive management.

## CASE DESCRIPTION

We report a case of 28 y.o man with suicidal inclination ingesting 50ml of indoxcarb 15.84% that was successfully treated with Methylene Blue. Upon arriving on our doorstep he was found alert, not breathless but registering oxygen saturation of 88% even when supplemented by non rebreathable High Flow Oxygen Mask of 15L/min and cyanosed peripherally. Paradoxically, his blood gas was normal on HFMO<sub>2</sub> pH 7.40 PaCo<sub>2</sub> 34 PaO<sub>2</sub> 372 HCO<sub>4</sub> 22.8 lactate 1.1. His other parameters were normal; BP 120/74 PR 73 t: 36 dxt 4.2 Physical Examination of the lungs, abdomen and the heart was relatively normal. His MetHb level was rocketing uphill from an initial level of 12.2, 22.8 then to an alarming level of 38. He was treated with methylene blue immediately and was able to achieve oxygen saturation to 97% over 3-4 days.

## DISCUSSION

Indoxcarb can precipitate life-threatening methaemoglobinaemia, but a single dose of methylene blue given promptly will cure the person. The blood gases may appear ostensibly normal, but one glance at the man's fingers and oxygen saturation would narrate a different story altogether. This is one of the few instances where blood gas results may not be accurate to rely on, MetHb level, oxygen saturation via pulse oximetry and the overall clinical picture may be of better surrogate for reliable monitoring. The reasons for the seemingly normal blood gas PaO<sub>2</sub> and a dangerously low SPO<sub>2</sub> can be boiled down to 2 reasons; PaO<sub>2</sub> in blood gas is a measure of dissolved oxygen in the plasma (usually being normal) and the absorption of wavelength to determine SPO<sub>2</sub>. Pulse oximetry using distinct wavelengths absorption to estimate oxygen saturation will face technical glitches as MetHb absorbs both the wavelengths leading to confusingly low SPO<sub>2</sub>.

## CONCLUSION

Patient developing Methaemoglobinaemia after ingesting indoxcarb can be treated successfully if given methylene blue promptly.

**Keywords :** MetHb, methaemoglobinaemia, methylene blue, indoxcarb

### REFERENCE :

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