**THE CYANOSED NORMOXIA GENTLEMAN: A rare presentation of dapsone-induced methaemoglobinemia**

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**Introduction:**

When encountering a cyanosed,blue patient, we often anticipate a tachypneic patient with severe hypoxia in their blood gas. What if these patients don’t exhibit such severe tachypnea or hypoxia? This is possible in methaemoglobinemia, a condition whereby there is oxidation of iron from ferrous form (Fe 2+ ) to ferric form ( Fe 3+) which induces a haemoglobin structural change that shifts the oxygen dissociation curve to the left, hence reducing the unloading of oxygen at the tissues as well as the oxygen carrying capacity of haemoglobin.

**Description:**

We present a 44 year old Chinese gentleman with HIV and multiple prior admissions for Pneumocystis Pneumonia. He was started on Tablet Dapsone 200mg OD during his clinic appointment. He came to us with a complaint of generalised rashes 4 days after initiation of Tablet Dapsone with a one week history of fever . He appeared cyanosed over the lips and peripheries. He was not tachypneic but his saturation under room air did not exceed 88%.

However, the arterial blood gas taken did not demonstrate a hypoxic picture; with a PO2 (partial pressure of oxygen) of 435.3. When started on High Flow Mask (HFM) 15L/min, his saturation still remained below 90%.

He was then started on High Flow Nasal Cannula(HFNC) 60L/60%.

Despite the high level of HFNC setting, his saturation did not exceed 90%.

A bedside methaemoglobin test was then taken, which indicated elevated levels of methaemoglobinemia at 14.3%

**Outcome:**

The patient was given IV Methylene Blue 1mg/kg over 30 mins. His central and peripheral cyanosis resolved after an hour. Methaemoglobin levels reduced from 14.3% to 4.6%.

His saturation then increased to above 90% after which he was weaned off HFNC.

**Conclusion:**

Methaemoglobinemia rarely presents in the emergency room but should appear in mind when encountering this classic phenomenon of a cyanosed patient with a huge difference between their saturation and PO2 on blood gas. It is imperative to note the drugs potentially causing methaemoglobinemia as we can anticipate the populations in which this disease can present. Prompt recognition of this entity is truly life-saving.