

Cyanosis and “mass SpO₂ screening” in pandemic times

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Letter to the Editor

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To the Editors,

Ever since World Health Organisation has declared the Coronavirus disease-19 pandemic,¹ it has been affecting millions worldwide. Preventive measures and especially checking saturations have become the norm. In a span of just 4 months, two cases of methaemoglobinemia were diagnosed, only due to the increased awareness among layman about saturation checks.

First was a 10-month-old asymptomatic boy evaluated on detecting saturation of 88% by his parents. An otherwise healthy infant weighing 9 kg, and not on any medications, had no clubbing and normal physical and cardiovascular system examination. Chest X-ray, echocardiography and saline contrast echocardiography were normal and not suggestive of any intracardiac or intra-pulmonary shunting. Arterial blood gases showed normal PO₂ values and hence serum methaemoglobin levels were done, which were 12.3% (normal < 1.5%). Parents were reassured and no further management was required. Second was a 10-year-old boy, hitherto unevaluated, investigated because parents were symptomatic for Coronavirus disease-19, was having saturations of 90%, no clubbing, widely split and fixed second heart sound and an ejection systolic murmur. Echocardiogram showed large atrial septal defect with left to right shunt and normal pulmonary venous drainage. Arterial blood gases showed normal PO₂ and hence again, methaemoglobinemia was suspected and his serum methaemoglobin levels were 36.3%. He underwent successful surgical atrial septal defect closure.

Congenital methaemoglobinemia is a very rare disease, with real incidence unknown.² Diagnosis is difficult because of asymptomatic status and clinically unrecognisable cyanosis. In Coronavirus disease-19, “happy hypoxaemia” has been a danger sign,³ and hence public health systems across the world have been stressing on detecting decreasing saturation levels even for asymptomatic individuals. An indirect by-product of this “mass SpO₂ screening” has been the increased incidence and diagnosis of methaemoglobinemia. Increased health awareness, mandatory preventive measures and early detection of certain diseases can be considered as a silver lining in this otherwise dark cloud

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