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Is it the COVID-19 happy hypoxia syndrome or the COVID 19 infodemic syndrome?



Recently, we admitted a 77 year old patient with proximal humerus fracture for preoperative evaluation. This patient was asymptomatic and COVID negative but on the chest X-ray, he had ground glass opacities in the lower zone on the right side. We, of course postponed the surgery and scheduled him for a High Resolution Computed Tomography (HRCT) chest scan but our anaesthesiologist opined that there are many atypical presentations of COVID, one of which is the happy hypoxia syndrome, which may be a diagnosis in this particular patient. Hence, we searched the literature for "happy hypoxia" on June 19, 2020, hoping to find several articles on this topic.

PubMed Search: While our PubMed search and back references search yielded only 4 relevant COVID publications [1–4] with the keywords "happy hypoxia" and "happy hypoxemia", our google search yielded 2,86,000 results. Furthermore, It was interesting to note that of the 4 publications, only 2 of them were research articles [3,4]. The remaining two articles that we found were: a commentary from the Science journal [1]; and a opinion piece that called attention to this problem [2].

The first research article was a study on 27 patients by Negri et al. [4] who said that the patients with this syndrome were hypoxemic and should be treated by low molecular weight heparin as the happy hypoxia was caused by micro infarcts in the pulmonary vasculature.

The second research article was by Caputo et al. [3], who said that regular proning of the non-intubated awake patients improved the oxygenation of 37 out of 50 patients with asymptomatic hypoxemia.

Meanwhile, our asymptomatic patient with suspicious x-ray also returned with a normal HRCT of the chest and we were rest assured about the absence of any active disease. The "happy hypoxia syndrome" was in the news in the months of April–May. The large number of results available through google signifies the abundance of information through popular media outlets, while only 2 research studies in PubMed tells us that the real science is very limited. Catchy and euphemistic term like "happy hypoxia" stay more in our conscious than the real science itself. An overload of information is likely to give rise to availability bias [5] and cognitive bias [6]. When faced with doubtful situations, we are likely to jump to new and attractive conclusions, because of ease of recall. Ironically, it is in these circumstances that our clinical judgement is most often needed.

Declaration of competing interest

The authors declare no conflict of interest, no funding was received related to the present work and all authors certify this represents true and honest work.

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