The use of pulse oximetry in chiropractic practice: a rationale for its use: the authors' response

Thank you for the opportunity to respond to this Letter to the Editor. We appreciate that there is interest in our technical article.¹ It appears to us that 3 points are being raised about our article. It is being suggested that (1) our use of the Roth and Holtmann reference does not support our statement that “pulse oximetry is indicated because hypoxia is commonly found in the elderly,” (2) that our use of the article by Sommermeyer et al does not support our “position that pulse oximetry is indicated in hypoxia-related disorders,” and (3) that our use of the Braun chapter does not “support (our alleged) contention that pain is an indicator for pulse oximetry.”

We feel that all 3 of these points do not accurately describe what we stated in our article. We offer an explanation and response to these points. Firstly, we use the article by Roth and Holtmann² to support our statement that hypoxia may be found in elderly patients (see “1” in Fig 1); and this article clearly states that hypoxia is commonly found in elderly patients. We do not use this article to argue that pulse oximetry should be used in elderly patients (see “3” in Fig 1).

Secondly, we use the article by Sommermeyer et al³ to support our statement that hypoxia is also commonly found in persons with “coronary vascular disease, coronary artery disease, disorders of balance, hypertension, chronic migraines, and anxiety and mood disorders...” The article by Sommermeyer et al asserts those concepts labeled as “A” in Fig 2. It is an inherent property of pulse oximetry that, in any condition associated with oxygen desaturation, pulse oximetry is indicated (see “B” in Fig 2).

Fig 1. Use of the article by Roth and Holtmann.²

Fig 2. Use of the article by Sommermeyer et al.³

Finally, we use the Braun chapter⁴ to support our position that pain can cause inadequate mechanical ventilation. Based upon this proposition, inadequate mechanical ventilation can possibly cause desaturation. Therefore, pain may be an indicator for pulse oximetry. We are not asserting that pain itself can cause desaturation.

After reviewing the comments and our own references, it is apparent to us that, in these instances, this is a simple misinterpretation of our arguments. Hopefully, our explanations serve to clarify our positions for readers of our article.

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