

# Letter To The Editor: Gastrointestinal complications after cardiac surgery: Incidence, predictors, and impact on outcomes

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## *Title Page:*

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**Letter:**

Dear Editor,

We have recently reviewed the article with substantial attentiveness entitled "Gastrointestinal complications after cardiac surgery: Incidence, predictors, and impact on outcomes" by Nicholas R. Hess et Al.<sup>1</sup> The complications following cardiac surgery are well portrayed in this study. The author's work on this crucial topic is highly appreciated and applauded by the readers. We acknowledge the paramount conclusion of the study that gastrointestinal complications do not tend to occur in every post-cardiac surgery but if occurs, can result in increased mortality of the patient and other multiorgan complications. However, we would like to add a few more points concerning the study's validity.

Initially, neglecting the patient characteristics and variables can alter the authenticity of the study. Therefore the author's in their study should have broadened the inclusion criteria while assessing the intra and postoperative complications in the participants. For example, a 2014 study included additional predictive factors like increased blood transfusion and prolonged mechanical ventilation, which also supported their findings.<sup>2</sup> Secondly, neurological dysfunction has also been categorized as a risk factor for gastrointestinal complications post-cardiac surgery, and this study's authors did not go through the neurological status of the participants. For illustration, a 2005 study included neurological dysfunction as one variable and found a positive association with the study's outcomes.<sup>3</sup>

Moreover, this study is conducted at a single center emerges with various concerns about this study. To address this concern, the authors should have tried to include participants from various locations and hospital settings due to the influence of different socioeconomic statuses of an individual on the study's outcome. As an illustration, a 2017 study opted to include participants from the whole United States who underwent cardiac surgery.<sup>4</sup> Lastly, decreased blood supply to any organ eventually results in organ dysfunction and requires immediate intervention. Therefore the authors should have asked for any factors which cause visceral hypoperfusion. For example, a study in 2020 highlighted that using splanchnic vasoconstrictors causes visceral hypoperfusion and impaired oxygenation of the tissue and further progresses the incidence of mortality in post-cardiac surgery patients.<sup>5</sup>

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