In Response to Letter Title “Immediate Hemodynamic and Gaseous Exchange Effect of Bi-Level Positive Airway Pressure after Cardiac Surgery: Our Insight to Hamid et al.’s Study”

The Editor,

Thank you for the opportunity to respond to the letter by Karim et al.[1] in reference to our study.[2] The authors in this letter have expressed few concerns regarding our study and I would like to respond in the same sequence.

First critique is that we only used Bilevel Positive Airway Pressure (BiPAP) in nonhypercapnoeic patients. It is erroneous, as we also included hypercapnoeic patients. In our study eight patients had PaCO2 50 mm Hg or greater. The mean value of 44 mm Hg in pre-BiPAP period probably gives a false impression that these patients were excluded.

About echocardiographic evaluation of cardiac function before and after applying a BiPAP, I think it is difficult as you know that once you decide about BiPAP application it should be done quickly to prevent decompensation. I was unable to find any study where ECHO was used in such situation. It is a good idea but may be impractical in this scenario. Hoffman et al.[3] also used PA catheter readings for cardiac index and cardiac output rather than relying on echocardiography. Their study showed improved cardiac function after BiPAP and this effect was also present in our study. Another question regarding pulmonary HTN, we did not find pulmonary HTN in preoperative evaluation and second it would have made no difference as we compared the pre and post BiPAP hemodynamics.

Second, about comorbidities such as COPD and sleep apnea, we were unable to find COPD and sleep apnea complaints during preoperative evaluation. These questions were asked specifically and past medical record was checked for these conditions.

Regarding pain and sedative medications influencing parameters. During the short study period, no one was given sedatives or pain medications so I do not think it is an issue here. Generally, we avoid sedatives in all postoperative patients and even analgesics, which we use have minimal effect.

About the effect of BiPAP on reintubation rate, there are several studies mentioned that BiPAP application reduces reintubation rate in respiratory failure patients.[4,5] I agree with the authors that the prophylactic use of BiPAP is controversial. They mentioned Ağiroğlu G et al.[6] study where BiPAP was used prophylactically in nonrespiratory distress patients. It was used twice for 20 min with 3 h interval while we used different criteria for included patients and duration of application was different as well. We firmly believe that BiPAP application does help the patient in respiratory distress after cardiac surgery and reduces reintubation rate.

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Nil.

Conflicts of interest
There are no conflicts of interest.

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Comment on: Anesthesiologists and Job Satisfaction in Cardiac Cath Lab: Do we Need Guidelines?

The Editor,

We have read with great interest the article recently published by Annachhatre et al. titled “Anesthesiologists and Job Satisfaction in Cardiac Cath Lab: Do We Need Guidelines?”. [1]

We have a few observations which we would like to share with the authors and readers of the journal.

1. We agree that the stress level among the cardiac anaesthetist is high and they are relatively underpaid and undervalued. Their role is not only limited to giving anaesthesia but also postoperative critical care especially in advanced interventional cardiology where they are core members of “Heart Team”. In India, if we look at the payment structure in other fields also, there is a discrepancy especially in the private sector and is not regulated as it is in the government sector. We suggest the societies like Indian association of cardiovascular and thoracic anaesthesia should take a lead and formulate the manual for fee structure.

2. The number of procedures and the complexity is increasing day by day specially with introduction of transcatheter aortic valve replacement (TAVR) and complex high-risk indicated procedure (CHIP) programmes. But if we look at the trained human resource, we will find a huge gap between cardiology and cardiac anaesthesia. According to the information available at medical council of India website, the number of seats for DM cardiac anaesthesia is 49 only as compared to 406 for DM cardiology and 194 for MCh cardiothoracic and vascular surgery. This makes the excess burden on the available resources as and thus the stress.

3. Another important measure to decrease the stress level is to create separate cadre of Cardiac Anaesthesia Assistant similar to the Cardiac Cath lab technicians as discussed by the authors. This will also give impetus to the skill development programme by Government of India. The most important benefit is that the technician may be directly recruited for Cath Lab, which helps in building repo with the operator as the availability of the same cardiac anaesthetist may not always be possible.

4. Job satisfaction is one of the most important aspects in professional life. Apart from having good salary or payment, there is a need to have good professional conduct in Cath lab and cardiac operation theatres. There is a need of enhanced communication between cardiologist, cardiac surgeon, and cardiac anaesthesiologist not only during the procedure but also socially. It helps in making life better with low stress level which ultimately reflects in better patient care.

5. All procedures done according to the guidelines help in improved patient care and also prevents from unnecessary medico legal suits. It is the responsibility of the concerned societies to make guideline or practicing manual for their members and other concerned practitioners.

6. We would also like to have attention of the authors regarding the number of Cath labs in India which in the manuscript have been mentioned only 172 units. The data from the National Interventional Council shows 705 centres were active in 2018 and is increasing with each passing year.

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Conflicts of interest
There are no conflicts of interest.

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