Author's response to reviews

Title: Successful resuscitation after fatal carbon dioxide embolism during laparoscopic nephrectomy

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Author's response to reviews: see over
Dear editor:

Please find enclosed the manuscript: “Successful resuscitation after fatal carbon dioxide embolism during laparoscopic nephrectomy” by Xiangming Fang et al., to be submitted as a Short Communication to BMC ANESTHESIOLOGY for consideration of publication. All co-authors have seen and agree with the contents of the manuscript and there is no financial interest to report. We certify that the submission is original work and is not under review at any other publication.

In this manuscript, we report a 52-year-old female who underwent a scheduled LN and subsequently developed cardiac arrest. The patient underwent general anesthesia. After intraperitoneal carbon dioxide insufflation, the perirenal fascia was opened, and the renal artery and vein were exposed. When the surgeon cut the renal vein after clamping it using the Hem-o-lock, a series of bubbles ran out from the opening cut. Simultaneously, the patient developed serious hemodynamic deterioration, and remarkably decreased end-tidal carbon dioxide level was observed. In addition, transesophageal echocardiogram verified the existence of paradoxical CO$_2$ emboli in the left heart chambers without intracardiac right-to-left shunt. Fortunately, the patient was successfully resuscitated and stabilized after cardiopulmonary resuscitation and inotropic drug support. Eleven days after surgery, she was discharged without any complications. From our study that with the increasing application of laparoscopic techniques, gas embolism must be considered as a possible cause of sudden cardiocirculatory failure during laparoscopic surgery.
We believe that our findings could be of interest to the readers of BMC ANESTHESIOLOGY because they bring new and strong evidence that the importance of fast responses when a catastrophic gas embolism occurs.

We hope that the editorial board will agree on the interest of this study.

We are pleased to supplement the contribute and a conflict of interest. Thank you for your consideration.

Sincerely yours,

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