

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 72089

Title: Paradoxical carbon dioxide embolism during laparoscopic hepatectomy without intracardiac shunt: A case report

Provenance and peer review: Unsolicited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05830717

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Portugal

Author's Country/Territory: South Korea

Manuscript submission date: 2021-10-05

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-10-08 09:44

Reviewer performed review: 2021-10-08 10:44

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
<https://www.wjgnet.com>

Peer-reviewer statements	Peer-Review: [<input checked="" type="radio"/>] Anonymous [<input type="radio"/>] Onymous Conflicts-of-Interest: [<input type="radio"/>] Yes [<input checked="" type="radio"/>] No
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SPECIFIC COMMENTS TO AUTHORS

It is a well written case report, that emphasizes the importance of a quick and accurate diagnosis of a rare, but potentially fatal, surgery complication. The possibility of paradoxical CO2 embolism, even in the absence of a patent foramen ovale, was also highlighted and the main causes were well presented and discussed. It would be also interesting to discuss other risk factors for CO2 embolism; if there are any situations where you recommend to do TEE pre-insertion; and the importance of dedicated and well trained teams in this type of complex surgery.

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Title: Paradoxical carbon dioxide embolism during laparoscopic hepatectomy without intracardiac shunt: A case report

Provenance and peer review: Unsolicited manuscript; externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 02842758

Position: Editorial Board

Academic degree: PhD

Professional title: Associate Professor, Staff Physician

Reviewer's Country/Territory: China

Author's Country/Territory: South Korea

Manuscript submission date: 2021-10-05

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-10-27 01:34

Reviewer performed review: 2021-10-27 09:42

Review time: 8 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
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**Peer-reviewer
statements**

Peer-Review: [☒] Anonymous [☐] Onymous

Conflicts-of-Interest: [☐] Yes [☒] No

SPECIFIC COMMENTS TO AUTHORS

This is a well-organized case report. It provides the valuable information for the anesthesiologist who conducts the intraoperative management for the patients undergoing laparoscopic hepatectomy. The authors presumed that the overflow of a large amount of venous gas bubbles entering through the damaged blood vessel was the main mechanism. The agitated saline test may be helpful in differentiating the intracardiac or extracardiac causes resulting in the paradoxical embolism. The emergence of the left side gas bubbles after over 5 heart-beats indicates the existence of the abnormal communication of pulmonary arterioles and venous.