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LETTER

Decreased Arterial Oxygen Pressure Indicates Hypoxemia, a Well-Known Clinical Sign of Pulmonary Embolism [Letter]

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Dear editor

Pulmonary embolism is a common and potentially fatal acute cardiovascular disease. There are numerous predisposing environmental and genetic risk factor for pulmonary embolism. Surgery and postoperative period are strong provoking risk factors for the development of pulmonary embolism. The diagnosis of postoperative acute pulmonary embolism causes some difficulties and confusion because the same symptoms may be developed in other possible postoperative complications. Postoperative pulmonary embolism not only significantly increases postoperative hospital stay and healthcare costs, but also negatively affects the outcome of the surgical procedure. Therefore, determining the risk factors that predispose patients to pulmonary embolism and timely diagnosis and treatment of pulmonary embolism after surgery are of great importance in terms of prognosis.

In this context, I read with great interest an article published in your journal entitled "Factors Associated with Acute Pulmonary Embolism in Patients with Hypoxia After off-Pump Coronary Artery Bypass Grafting: A Case-Control Study".[1] In the mentioned research, the authors aimed to explore the factors linked to the occurrence of acute pulmonary thromboembolism within a cohort of patients exhibiting hypoxic saturation (oxygen saturation levels falling below 93%), subsequent to undergoing off-pump coronary artery bypass grafting. The researchers limited the exclusion criteria for the study to allergy to iodine contrast agents and severe liver or kidney dysfunction. However, the authors did not account decreased preoperative arterial oxygen pressure (hypoxemia) as an exclusion criteria which is an important clinical feature of pulmonary embolism.[2] In addition, they concluded that, decreased preoperative arterial oxygen pressure to be independently associated with postoperative pulmonary embolism. Therefore, it is not known for certain whether there is a pulmonary embolism before the surgery, which causes selection bias and therefore affects the results.

In conclusion, to put it in different words, when investigating postoperative pulmonary embolism, it must be absolutely sure that there is no preoperative pulmonary embolism, otherwise the accuracy of the results will be questionable.

Disclosure

The author reports no conflicts of interest regarding this communication.

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