PULMONARY THROMBOEMBOLISM DIAGNOSED WITH POINT-OF-CARE ULTRASONOGRAPHY IN THE OPERATING ROOM: A CASE REPORT

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Case Presentation

1st surgery

An 84 year-old-woman had left upper arm surgery eight days earlier in this hospital.

A fall on POD 6

She fell in the bathroom while on the ward during the early morning two days previously. She hit her head and fractured her right ankle. She was unconscious when she was found by a nurse, but soon regained consciousness. Her oxygen saturation was 88%, but increased to 94% with oxygen via a mask, with a blood pressure of 105/59 mmHg and heart rate 95 bpm. Although subsequent computed tomography (CT) of the head confirmed traumatic subarachnoid hemorrhage, with a small amount of blood in a region of the occipital sulci, no therapeutic intervention was necessary for the head injury. However, she needed surgery for open reduction and internal fixation of the fracture. She had atrial fibrillation, tachycardia of 120 bpm, and looked unstable at presentation before induction of anesthesia in the OR, although she responded appropriately to questions.

2nd surgery

She underwent a non-scheduled surgery because of an ankle fracture. The surgery was performed under general anesthesia using desflurane and air combined with the femoral triangle block and sciatic nerve block through the popliteal approach. The surgery took one hour. Her anesthesia course of about two hours and five minutes was unstable. Her heart rate varied between 95 and 140 bpm and systolic blood pressure varied between 70 and 110 mmHg, and frequent iv phenylephrine. Her SpO₂ was 92-98%, though F_IO₂ =50%. Her body temperature was 38.5 °C. After removal of iGel, she looked pale, although her SpO₂ was 94% with an oxygen mask at 4 L/min. Because of the unstable hemodynamic state and unexplained low SpO₂ during and after surgery, we performed POC ultrasonography with a portable device to rule out disorders in the heart and lung.

CT angiography

Take home messages

It was not a simple fall, but fainting!

This case provided two lessons;

- 1.that PE could manifest as a fall in postoperative patients,
- 2.that POC ultrasonography is the first step in the diagnosis of PE in the OR.

Reference

1. N Engl J Med 2016; 375:1524-31.

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