

[PICTURES IN CLINICAL MEDICINE]

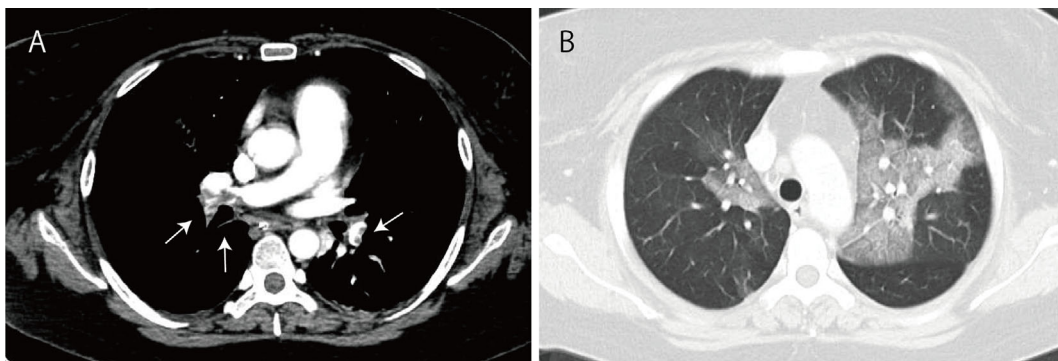
Regional Negative Pressure Pulmonary Edema with Pulmonary Thromboembolism

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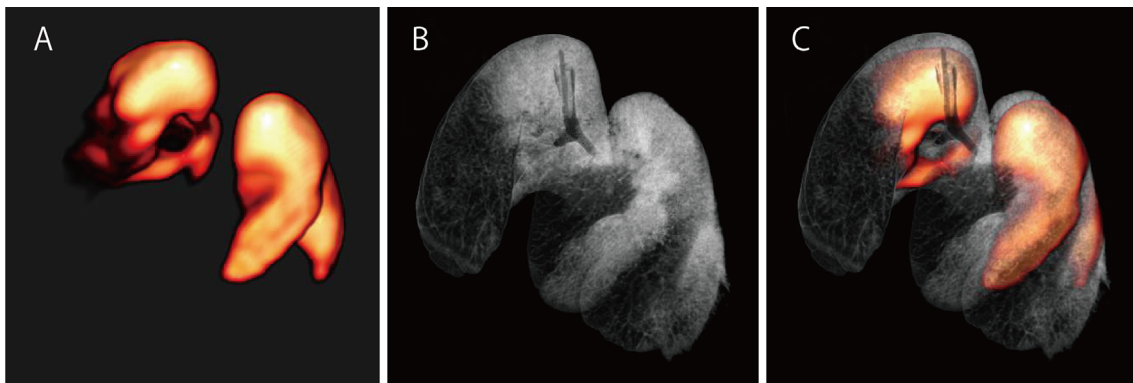
Key words: negative pressure pulmonary edema, pulmonary thromboembolism, obstructed sleep apnea

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Picture 1.



Picture 2.

A 33-year-old woman with a body mass index of 43 presented with progressing severe dyspnea. Her oxygen saturation was 73% with room air, and contrast-enhanced computed tomography (CT) showed a deficit in the pulmonary artery (arrow), suggesting pulmonary thromboembolism (Picture 1A) with regional ground-glass opacities in both lung fields (Picture 1B). Bronchoalveolar lavage fluid was serous, and no bacterial organisms were detected. High inspiratory

effort during dyspneic breathing that occurs in obese patients with obstructed sleep apnea may have caused excess negative pressure in the alveoli, leading to pulmonary edema (1, 2). The blood-perfused lesions on lung scintigraphy (Picture 2A) were consistent with the ground-glass opacity lesions on three-dimensional reconstructed CT images of the lungs (Picture 2B), suggesting the negative-pressure pulmonary edema was limited to the perfused le-

sions, with resultant severe hypoxemia (Picture 2C). The symptoms were relieved after five days of mechanical ventilation and anticoagulation, and she was discharged home on day 13.

The authors state that they have no Conflict of Interest (COI).

References

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edema. *Intensive Care Med* **40**: 1140-1143, 2014.

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