

中文題目：一位新手潛水員因胸痛而診斷出縱膈腔氣腫

英文題目：Pneumomediastinum diagnosed in a novice diver presenting with chest pain

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Case report:

A 27-year-old man presented to our outpatient department with 2 days of chest pain and neck soreness. He had no significant medical history before. His vital signs were as follows: blood pressure, 112/85 mmHg; heart rate, 75 beats/min and respiratory rate, 18 breaths/min. Physical examination revealed bilateral cervical and supraclavicular crepitations. He had been scuba diving about 50 minutes at a maximum depth of 27 meters with rapid ascent 2 days ago. Chest radiography showed gas outlining inner surface of mediastinal pleura and subcutaneous emphysema. Subsequent computed tomography (CT) of the chest confirmed pneumomediastinum and extensive subcutaneous emphysema. The patient was treated conservatively and a follow-up chest radiograph showed complete resolution of the pneumomediastinum and subcutaneous emphysema.

Discussion:

There are more than 9 million recreational scuba divers in the United States, and the incidence of diving-related accidents has increased in proportion. Diving-related injuries include various forms of barotrauma, decompression illness, pulmonary edema, and nitrogen narcosis. Pulmonary barotrauma is the most severe form of barotrauma, and could be fatal. The ambient pressure decreases and the gas volume expands during ascending. If a diver holds his breath, alveolar rupture may occur. Then the expanded gas tracks along the perivascular sheath into the mediastinum and causes pneumomediastinum.^{1,2} Crepitation in the neck is a typical sign of subcutaneous emphysema, and can be easily identified via physical examination, even by the patient himself. The main presenting symptom of pneumomediastinum is retrosternal chest pain, radiating to the neck or the back, often self-limited. The treatment of pneumomediastinum is directed towards symptom relief and the prognosis is favorable.^{3,4}

References:

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