

[PICTURES IN CLINICAL MEDICINE]

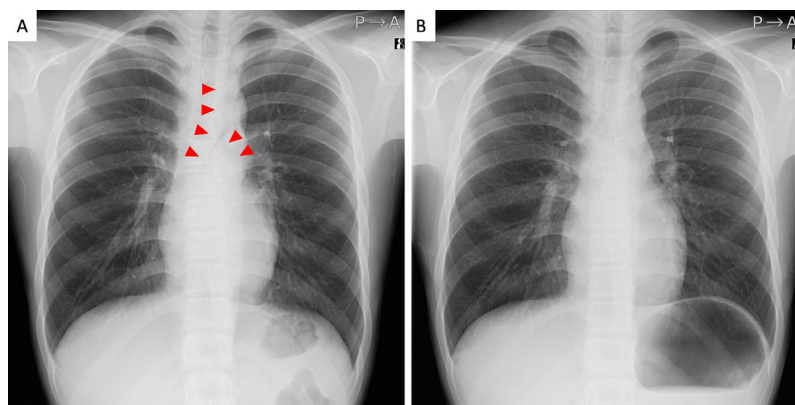
Mediastinal Emphysema with Electrocardiogram Abnormality

Kazuo Tsuchiya^{1,2}, Shinya Sagisaka¹ and Takafumi Suda²

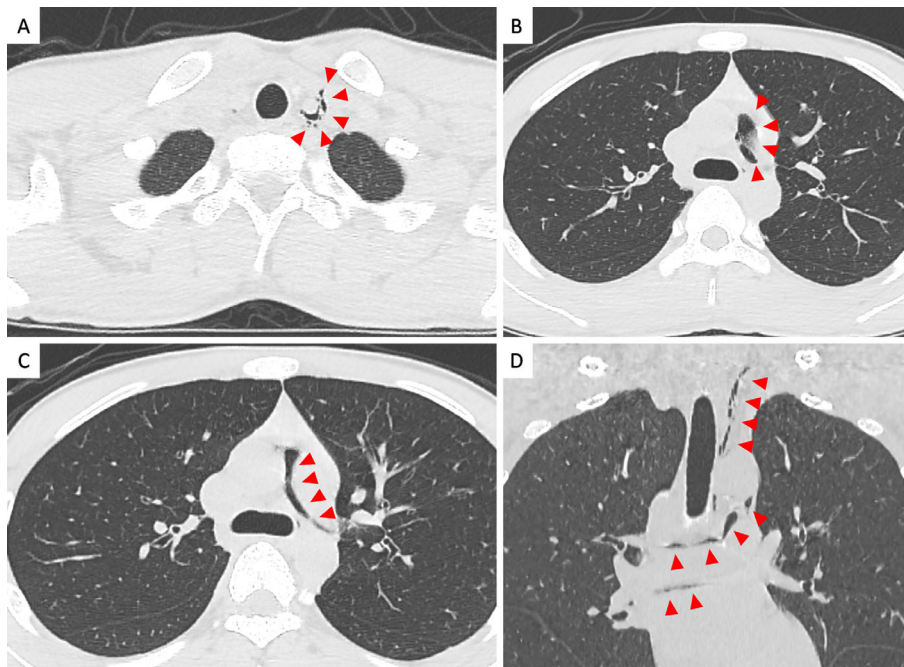
Key words: mediastinal emphysema, electrocardiogram abnormality

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Picture 1.

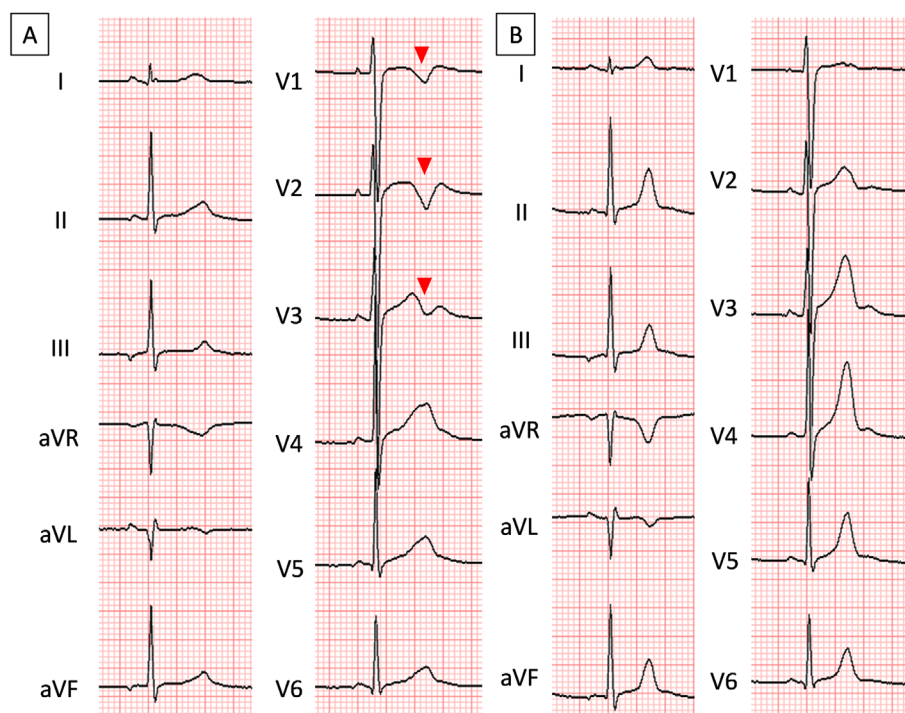


Picture 2.

¹Department of Respiratory Medicine, Juzen Memorial Hospital, Japan and ²Second Department of Internal Medicine, Hamamatsu University School of Medicine, Japan

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Correspondence to Dr. Kazuo Tsuchiya, bandfor2004@yahoo.co.jp



Picture 3.

The patient was a 15-year-old boy who had been referred to our hospital. Seven days previously, he noticed dyspnea. He has also noticed chest pain a few days previously. The chest pain had not been continuous and the onset was not sudden. He did not have fever. Chest auscultation revealed a crunching sound, synchronous with the systolic phase of the heartbeat (Hamman's sign). Chest palpitation did not show a sensation of crushing snow. Chest radiography demonstrated mediastinal emphysema (Picture 1A, 2). Electrocardiography (ECG) showed T wave inversion in V1-V3 (Picture 3A). Other examinations, including the measurement of troponin I and creatine kinase MB, and echocardiography, revealed no cardiac abnormalities. Furthermore, he did not show an elevated serum white blood cell count or C reactive protein level, which would suggest mediastinitis. After 7 days, chest radiography revealed the disappearance of mediastinal emphysema (Picture 1B). The abnormal T wave on ECG also

normalized (Picture 3B). We should keep in mind that mediastinal emphysema can cause abnormal ECG findings (1, 2).

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

References

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