

## Pneumomediastinum and pneumorrhachis as complications of dermatomyositis

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A 45-year-old woman diagnosed with dermatomyositis was admitted with swelling of the neck and anterior chest wall and dysphonia for 3 days. Subcutaneous crackles were palpated on the anterior chest wall. Her hands exhibited signs of dermatomyositis (Gottron's papules, mechanic's hands, and Raynaud's phenomenon) (Figure 1A). Chest CT scan showed extensive subcutaneous emphysema dissecting the muscular planes in the neck and chest wall, pneumomediastinum, right pneumothorax, and pneumorrhachis. Interstitial lung disease was also observed (Figures 1B and 1C). Oral contrast excluded esophageal rupture. A chest CT scan performed 9 months earlier revealed a subpleural bleb in the left upper lobe and interstitial alterations (Figure 1D). The patient was treated conservatively and discharged to follow-up.

Spontaneous pneumomediastinum is an uncommon complication of dermatomyositis. Rupture of subpleural

blebs or subpleural infarctions resulting from vasculitis are possible mechanisms.(1,2) In the case reported herein, the rupture of the subpleural bleb observed previously was considered the cause of the pneumomediastinum and the pneumothorax. In rare situations, air can dissect through the fascial planes from the posterior mediastinum or retropharyngeal space through the neural foramina into the epidural space, causing pneumorrhachis. This condition is usually self-limiting and conservatively managed. (3)

## **AUTHOR CONTRIBUTIONS**

TAG: study design, data collection, and writing and revision of the manuscript. DBP and MMB: supervision of manuscript editing, writing and revision of the manuscript. TAG, DBP, and MMB: revision and approval of the final manuscript.

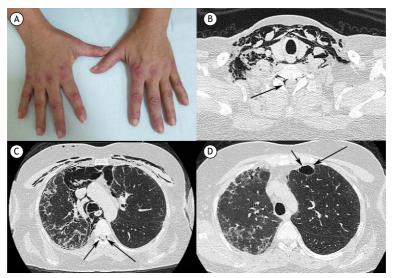


Figure 1. Forty-five-year-old woman with dermatomyositis. (A) Gottron's papules were seen on the hands due to dermatomyositis. (B, C) Axial CT images at admission showed extensive subcutaneous emphysema in the neck and chest wall, pneumomediastinum, right pneumothorax, and pneumorrhachis (black arrows). (D) Axial CT image nine months earlier showed a subpleural bleb in the left upper lobe (black arrows) and interstitial lung disease, which was more pronounced in the right lung.

## REFERENCES

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