Successful treatment of pneumomediastinum in a patient with interstitial lung disease due to anti-synthetase syndrome: A case report

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ABSTRACT

Abstract is not required for Clinical Images
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CASE REPORT

A 35-year-old female with interstitial lung disease due to anti-synthetase syndrome presented with cough, hoarseness and facial swelling. Chest computed tomography scan demonstrated significant pneumomediastinum (Figure 1). Bronchoscopy and esophagram were unremarkable. We began high-concentration oxygen (10 L/min with non-rebreather face mask for 12-hours/day), withheld mycophenolate mofetil, reduced prednisone and began dextromethorphan. After one-month, there was complete resolution of her symptoms and pneumomediastinum.

DISCUSSION

Pneumomediastinum (PNM) is a rare complication of anti-synthetase syndrome with only three cases reported since 1986 [1–3]. The associated one-month mortality is 25%, which highlights the need for effective management [4]. The management of PNM in interstitial lung disease is based on case reports and experience forming expert opinion. However, the best management requires understanding the pathogenesis [5]. Several mechanisms of PNM in interstitial lung disease have been proposed including the Macklin effect, worsening vasculitis leading to airway rupture, and weakened alveolar walls from immunosuppression [6]. In this case, reducing immunosuppression suggested that weakened alveolar walls was a factor and using high-concentration oxygen and cough suppressant decidedly contributed to the full recovery. Notably, this is the second case in literature that has reported success using high-concentration oxygen for the treatment of PNM [7].

CONCLUSION

We report a case of pneumomediastinum in a patient with anti-synthetase syndrome who was successfully
treated with reduction in immunosuppression, high-concentration oxygen, and cough suppression.

Keywords: Anti-synthetase syndrome, Dermatomyositis, Interstitial lung disease, Pneumomediastinum

REFERENCES

1. Bradley JD. Spontaneous pneumomediastinum in adult dermatomyositis. Ann Rheum Dis 1986 Sep;45(9):780–2.
2. Carmody E, McNicholl J, Chadwick G, Bresnihan B, Fitzgerald MX. Prolonged spontaneous pneumomediastinum in adult dermatomyositis. Ann Rheum Dis 1987 Jul;46(7):566.
3. Cicuttini FM, Fraser KJ. Recurrent pneumomediastinum in adult dermatomyositis. J Rheumatol 1989 Mar;16(3):384–6.
4. Ma X, Chen Z, Hu W, et al. Clinical and serological features of patients with dermatomyositis complicated by spontaneous pneumomediastinum. Clin Rheumatol 2016 Feb;35(2):489–93.
5. Tang R, Millett CR, Green JJ. Amyopathic dermatomyositis complicated by pneumomediastinum. J Clin Aesthet Dermatol 2013 Mar;6(3):40–3.
6. Macklin MT, Macklin CC. Malignant interstitial emphysema of the lungs and mediastinum as an important occult complication in many respiratory diseases and other conditions: An interpretation of the clinical literature in the light of laboratory experiment. Medicine 1944;23(4):281–358.
7. Patel A, Kesler B, Wise RA. Persistent pneumomediastinum in interstitial fibrosis associated with rheumatoid arthritis: Treatment with high-concentration oxygen. Chest 2000 Jun;117(6):1809–13.
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