

# A Simple Cough or Something More?: When Vaping Goes Wrong. An Unexpected Case of Hamman Syndrome in Healthy Individual

**NURUL AIN SYARAFINA BINTI MOHD NASIR, BADRUL HISHAM BIN MD SUPIAN, MOHAMED AFIQ BIN MOHAMED YUSOF**  
HOSPITAL TENGGU AMPUAN AFZAN KUANTAN, PAHANG, MALAYSIA

## INTRODUCTION

Hamman Syndrome is a rare condition characterized by the presence of free air in the mediastinum without an obvious traumatic or iatrogenic cause. We present a rare case of Hamman Syndrome in a healthy young adult following vaping, highlighting the potential for e-cigarette use to induce barotrauma.

## CASE DESCRIPTION

A 20-year-old healthy man with a 2 years history of vaping was brought to the Emergency Department with a one-day history of cough, left neck swelling, and chest pain. He was alert, conscious, and not in distress, with stable vital signs. There no features suggestive of Marfan syndrome. Lung examination revealed signs of pneumothorax, in the left lung, and crepitus extending from the neck to the left chest. Lung ultrasound showed evidence of pneumothorax. Chest X-ray (Picture 1) and computed tomography (CT) scan of the thorax confirmed a left apical pneumothorax, pneumomediastinum, and extensive subcutaneous emphysema in the neck and upper thorax, with no evidence of tracheobronchial or oesophageal injury, nor subpleural blebs or bullae. A left chest tube was inserted, and a repeat chest X-ray (Picture 2) on day 6 showed resolution of the subcutaneous emphysema and pneumothorax, with resolving pneumomediastinum. The patient was discharged in stable condition and advised to stop vaping.

## DISCUSSION

Vaping has become increasingly popular worldwide. While the exact mechanism by which vaping induces Hamman syndrome remains unclear, contributing factors may include barotrauma from deep inhalation, irritant-induced coughing, and vaping-related inflammation. Although it is typically benign, the presentation can mimic life-threatening conditions such as Boerhaave syndrome and tension pneumothorax. However, distinct radiological features help differentiate these conditions. This case underscores the importance of recognizing vaping as a potential trigger for Hamman syndrome and highlights the need for patient education on its pulmonary risks. Further research is necessary to understand the long-term consequences of vaping and its role in spontaneous pneumomediastinum.



Picture 1



Picture 2

## KEYWORD

HAMMAN SYNDROME, VAPING

## CONCLUSION

A CT thorax scan is essential for diagnosing spontaneous pneumomediastinum while ruling out serious conditions. Early recognition prevents unnecessary treatments and proper care.

### REFERENCES:

- 1.Giordano R.T., Régis V.D.N; *Spontaneous pneumomediastinum (Hamman's syndrome)*; June 2012
- 2.Aida.A.R;Mohd.T.Y:*Hamman's Syndrome: A Rare Benign Syndrome* ;Jan 2020,; Mal J Med Health Sci 16(1): 357-359