

# AN INTERESTING CASE OF SUSPECTED E-CIGARETTES OR VAPING-ASSOCIATED ACUTE DELIRIUM (NON-EVALI): A CASE REPORT

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## INTRODUCTION

The use of e-cigarettes has become increasingly prevalent worldwide. In Malaysia, the prevalence of e-cigarette use has significantly increased from 9.8% in 2017 to 14.9% in 2022. Most of the cases were among adolescents aged 13 to 17-years-old.

## CASE DESCRIPTION

We describe a case of a 16-year-old student brought to our emergency department with an acute onset of altered sensorium associated with trembling in his bilateral upper limbs after taking several puffs of e-cigarettes at school.

Upon assessment, the patient had regained full consciousness but had a slow response to questions. He revealed a history of consuming e-cigarette with an unknown mixture called “mushroom” flavour prior to the onset of the symptoms.

The vital signs recorded were normal, and full neurological assessment was unremarkable. Blood investigations were within acceptable ranges and the urine drug test came back negative. The case was notified as non-EVALI to the District Health Office for further investigation.

The patient was subsequently admitted for observation and re-hydration, then discharged home after being asymptomatic for over 24 hours.

## DISCUSSION

Vaping-associated lung injury (EVALI) is still the main and widely discussed complication related to the E-Cigarette usage. However, non-pulmonary complications such as seizures, altered mental status, and poisoning from psychoactive substances like synthetic Psilocybin must not be ignored and should be suspected if there is a history of vaping related to current symptoms. In non-EVALI related complications, other systemic symptoms such as an increase in lacrimation, salivation, and skin flushing, gastrointestinal disturbance with a change in urinary

habits, and muscle cramping or weakness must be excluded to differentiate from other toxidromes.

A detailed history of vaping products use supported with a normal baseline blood investigations, urine drug test and imaging can assist in the diagnosis.

## **CONCLUSION**

Both EVALI and non-EVALI are classified as vaping-associated complications. Each diagnosis is the diagnosis-of-exclusion, with no specific investigations or imaging predicting the risk of morbidity or mortality. We emphasize the importance of screening for a significant vaping history in patients with an acute onset of altered mental status. A high suspicion level will help in early recognition; hence, timely management will facilitate a full recovery.

## **KEYWORDS**

E-cigarettes/vape, EVALI/Non-EVALI, Psilocybin