

E-cigarette or vaping product use-associated lung injury in an adolescent

IN REPLY: We thank McKenzie and colleagues¹ for their interest in our article.² We reported the case of a 15-year-old girl with the diagnosis of e-cigarette or vaping product use-associated lung injury (EVALI) who admitted to a 7-month history of vaping nicotine and presented with acute lung injury. She had an extensive negative microbiological and vascular screen. We would dispute the suggestion that this patient had an underlying urosepsis resulting in acute lung injury. Even though this patient reported dysuria and urinary frequency, the urine analysis was negative for nitrites and leukocytes. In addition, urine and blood culture were sent before the administration of antibiotic therapy and the results were negative. Although dysuria can be caused by infection, it can also be caused by vaginitis, urethritis,

or a non-infectious cause such as inflammation.³ While there are reported incidences of urosepsis resulting in acute lung injury, they were usually associated with oliguria, acute kidney injury and septic shock. This patient had normal renal function (creatinine level, 66 µmol/L) and blood pressure and did not require inotropic support during her hospital admission. Therefore, the proposed alternative diagnosis of urosepsis cannot be upheld.

Vitamin E acetate and tetrahydrocannabinoids-containing vaping products are implicated in the pathogenesis of EVALI, yet 15% of patients with this diagnosis report using only nicotine-containing products.⁴ Hence, no specific chemicals have been identified conclusively to date as the cause of the acute lung injury.⁵

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