

Case Report: A Young Man Seeking Advice About Vaping

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CASE HISTORY

A 32-year-old man presented to pulmonary clinic with questions about the risks of vaping. The patient had heard reports of vaping related pulmonary disease and deaths attributed to vaping and wanted to know how to minimize his risk.

These questions were asked during a routine follow-up visit for pleural effusion. The effusion was secondary to a ventriculoperitoneal shunt placed for hydrocephalus. The hydrocephalus was a complication of spina bifida at L3. The patient is an active smoker. He is attempting to quit smoking and has decreased from over 1 pack of cigarettes per day to about 2 cigarettes per day. He attributed his progress with smoking cessation to vaping. Prior to his decrease in smoking, the patient had developed cough with sputum production which resolved after he started vaping and decreased his cigarette smoking.

ANALYSIS/COMMENTARY

The New England Journal of Medicine recently reviewed what is known about vaping related lung disease.¹ The inescapable truth is that the most effective way to avoid vaping related lung disease is to avoid vaping. The alternatives, however, are not limited to vaping or not vaping. The patient might quit vaping and resume smoking over one pack of cigarettes per day. The patient might quit vaping, continue to work on smoking cessation, but suffer anxiety due to the absence of either habit. There are undoubtedly other significant possibilities that would significantly impact the patient's future health.

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When given the information that the best way to avoid vaping related lung disease was to avoid vaping altogether, the patient objected that he would likely resume cigarette smoking without the relief offered by vaping. The patient wanted to know how to minimize his risk of vaping without giving up the habit.

According to the Centers for Disease Control and Prevention (CDC) over 800 cases of vaping relating lung injury have been reported.² Twelve deaths have been confirmed in 10 states.² While this seems to be a lot, one must consider that as many as 10.8 million adults use electronic cigarettes in the United States.³ As best as we can tell, fewer than 1/10,000 people who vape will get vaping related lung disease. The CDC admits that the cause is unknown.² Disease is more likely with those who use products containing tetrahydrocannabinol (THC). It is unknown whether this association is causal or not. It is possible that oils used to dissolve the THC or impurities are responsible. Disease seems to be more likely in those who obtain their product from friends or "street" sources rather than reputable suppliers of branded products. As discussed in this issue of the journal, bans of electronic cigarettes will ensure that the only supply is illicit and more likely to cause disease.⁴

This patient obtained his vaping product from a reputable supplier that he had been using for years. The patient was advised that, if he could not abstain from both cigarettes and electronic cigarettes, to obtain product only from reliable sources. He was further advised to be aware of symptoms of cough, fever, nausea, or shortness of breath following vaping. If these symptoms were noted, he was advised to stop vaping and immediately be evaluated including chest x-ray.

The CDC released an interim guidance on vaping for health care providers subsequent to this patient encounter.⁵ The advice given this patient and the discussion in this commentary are consistent with the latest CDC recommendations.

Keywords: vaping, lung disease, prevention, smoking cessation

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