

[EDITORIAL]

Acute Eosinophilic Pneumonia and Heated Tobacco Products

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Key words: acute eosinophilic pneumonia, heated tobacco products, conventional cigarette smoking

(Intern Med 59: 2807, 2020)

(DOI: 10.2169/internalmedicine.5421-20)

The manuscript submitted by Tajiri et al. reported a patient with acute eosinophilic pneumonia (AEP) that was supposed to be attributable to the use of heated tobacco products (HTPs) after the patient had switched from using conventional cigarette smoking (1). The subject matter of this work is laudable and of interest to the real world pulmonologists who treat patients with diffuse lung disease including AEP.

The pathogenesis of AEP remains uncertain but the underlying and identifiable causes have been suggested (2). A well-known cause is conventional cigarette smoking, including first-time smoking, an increase in the smoking amount, a change of brand, or a resumption of smoking (2). In addition, electronic cigarettes (e-cigarette) (3) and HTPs (4) have also been described as identifiable causes. The case reported in this paper is novel because the change from conventional cigarettes to HTPs may have induced AEP. Conventional cigarettes and HTPs contain common toxic compounds such as nicotine and carcinogens (5, 6). The underlying causes are, not found in conventional cigarettes, but may be toxic compounds that are only found in HTPs, such as the primary solvent constituents. Actually, exposure to the vapor of e-cigarette associated solvents has been reported to induce lung lipid alteration in alveolar macrophages and epithelial cells and also suppressed innate immunity in mice (7).

In the future, it is necessary to further investigate the potential health concerns caused by, not only common toxic compounds, but also the constituents included in HTPs solvents. It is generally acknowledged that HTPs are less harmful than conventional cigarettes. However, there is no evidence to support this general notion and HTPs are therefore considered to absolutely be quite harmful. HTPs smoking for any purpose is not recommended, which is the same as for conventional cigarettes.

Author's disclosure of potential Conflicts of Interest (COI).

Seiichiro Sakao: Honoraria, Bayer Yakuhin; Research funding,

Nippon Shinyaku, Actelion Pharmaceuticals and Pfizer.

Financial Support

The present study was supported by a Grant-in-Aid for Scientific Research (JSPS KAKENHI Grant Number 19H03664) from the Japanese Ministry of Education and Science, research grants from the Respiratory Failure Research Group (H26-Intractable diseases-General-076) from the Ministry of Health, Labour and Welfare, Japan, and a grant to the Pulmonary Hypertension Research Group (15ek0109127h0001) from the Japan Agency for Medical Research and Development (AMED).

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Received: May 23, 2020; Accepted: June 1, 2020; Advance Publication by J-STAGE: July 21, 2020

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