Diffuse Panbronchiolitis Cases in India: An Update

Sir,

Diffuse panbronchiolitis (DPB) is an inflammatory lung disease, first identified in 1969. It is well recognized in East Asian countries such as Japan, China, and Korea.^[1] The name was proposed to distinguish it from chronic bronchiolitis. “Diffuse” refers to “presence of lesions through both the lungs” and “pan” refers to “inflammation in all layers of bronchioles.” At the time of discovery, DPB had poor prognosis because of recurrent respiratory infections leading to respiratory failure. In the years following the initial description of the DPB in Japan, cases were also identified in other parts of Asia including China and Taiwan. Clinicians across the world became aware of this disease during early 1980s. Over years, DPB cases have been reported from across the globe, thus giving it a recognition of distinct clinical entity. The prognosis of DPB significantly improved after introduction of long-term, low dose of erythromycin therapy in 1985.^[2]

A literature search was conducted in PubMed for DPB-related publications reported by Indian authors [Figure 1]. The search revealed that there are only three published case reports presenting clinical evidence of DPB in India. In first, Jadhav and Joshi from Mumbai described an uncommon case of 50-year-old female with DPB with thymoma.^[3] The second study by Nath *et al.* from Chandigarh city described case of a 65-year-old male who was being managed as a case of chronic bronchitis before DPB diagnosis was confirmed.^[4]

Figure 1: Study flow diagram. The PubMed search was conducted on April 30, 2017. The term Diffuse panbronchiolitis was searched in MeSH terms, title/abstracts, as a text word or as Supplementary concept, without any filter applied (date, language, or article type)

The group which reported the first DPB case presented another DPB case in 2012 in a 45-year-old male.^[5] Low-dose macrolides were administered in all three cases – azithromycin (250 mg, daily;^[5] 500 mg, daily;^[3]) and erythromycin (250 mg, QID),^[4] respectively. It is worth noticing that first two case reports were published in the same volume of the Indian Journal of Chest Diseases and Allied Sciences in 2010;^[3,4] whereas the third case was published 2 years later in the Journal of Postgraduate Medicine in 2012.

With the strong association reported between DPB and HLA-Bw54 (a serotype, predominant in East Asian population),^[6] the effects of ethnicity and genetic predisposition became clear. However, occasional DPB cases from other countries including India render the etiology still unclear. To the best of our knowledge, only three proven cases have been reported from India till now. Different ethnic background of Indian population (Caucasians, not Asian) might be one reason for low DPB reporting in Indian subcontinent, despite being part of Asia. However, the effects of DPB underreporting in India due to lack of awareness and recognition leading to misdiagnosis and delayed (or lack of) treatment cannot be ignored. Since DPB cases are being observed not only in East Asians, but also from other populations, there is a need to make pulmonologists aware and familiar with this disease.

Disclaimer

Opinions expressed in this article are the authors' own findings and does not in any manner reflect or represent the view of the organization to which he is affiliated.

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There are no conflicts of interest.

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