LITERATURE REVIEW

Farmer’s Lung Disease

Catur Agustiyanto*, Ariani Permatasari**
Department of Pulmonology and Respiratory Medicine, Faculty of Medicine, Universitas Airlangga - Dr Soetomo Hospital, Surabaya, Indonesia.

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ABSTRACT

Occupational lung disease is a lung disease or disorder that occurs due to the inhalation of dangerous particles, mist, vapors, or gases while a person is working. The materials accumulate in the respiratory tract or lungs. The type of lung disease that occurs depends on the size and type of the inhaled material. Substances that cause occupational lung disease are toxic materials called noksa. Noksa is a substance that can cause damage to the anatomical structure of body organs and cause respiratory tract function disorders. The lung disease that many farmers experience is often called farmer’s lung disease (FLD). FLD is part of hypersensitivity pneumonitis (HP), HP, also known as extrinsic allergic alveolitis, is a group of lung diseases caused by the inhalation of various antigenic organic materials. The most common cause is exposure to agricultural biological dust derived from straw, mold spores, or other dust. HP can be a secondary reaction due to repeated and prolonged inhalation of specific antigens in sensitive individuals. Diagnosis of FLD is often inaccurate. Many of these cases are diagnosed as idiopathic interstitial lung disease. A complete anamnesis should be performed, especially regarding the history of exposure to moldy hay, previous work, and domestic animals, to determine the existence of a history of exposure to the antigen and to confirm the diagnosis.

INTRODUCTION

The agricultural sector in Indonesia is an essential aspect of the country’s economy because agriculture in terms of production is the second most influential sector after the manufacturing industry. Based on the data from International Labor Organization (ILO), around 1.3 million people worldwide work in agriculture, nearly 60% are in developing countries. Most agricultural workers are found in Asia, accounting for more than 40% of the world’s farming population. Central Statistics Agency stated that the number of people working in Indonesia in the first quarter of 2018 was 127.07 million people. The agricultural sector has the most significant percentage at 28.79% or 35.7 million people.1,2

Based on the data obtained from data and information center of Ministry of Health Republic of Indonesia, occupational lung disease or disorders caused by dust from the processing and storage of agricultural products are estimated to be quite a lot in 2014, namely 40,694 people who experience lung disease due to work.3

Occupational lung disease is a lung disease or disorder that occurs due to the inhalation of dangerous particles, mist, vapors, or gases while a person is working. The materials accumulate in the respiratory tract or lungs. The type of lung disease that occurs depends on the size and type of the inhaled material. Substances that cause occupational lung disease are toxic materials called noksa. Some types of particles that can cause lung disease include organic dust particles (vegetable matter, animal cotton dust, grain dust, wood dust), inorganic dust (mining, metal industry, ceramics, silica, asbestos), and irritant gases (petroleum, ammonia, CO₂, NO₂).4,5

The lung disease that many farmers experience is often called farmer’s lung disease (FLD). The most common cause is the result of exposure to agricultural biological dust derived from straw, mold spores, or other dust.5

*Corresponding author: arianidrparu@gmail.com

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