CASE REPORT

A case of concomitant subcorneal pustular dermatosis and erythema nodosum leprosum in borderline lepromatous leprosy-relapses

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ABSTRACT

Subcorneal pustular dermatosis (SPD) is a rare, chronic, and recurrent pustular eruption characterized histopathologically by subcorneal pustules that contain neutrophils. SPD has been clearly reported conjunction with other diseases. Leprosy reactions are acute inflammatory process that immunologically driven on the chronic course of leprosy. Erythema nodosum leprosum (ENL) is a type II of leprosy reaction putatively can initiate SPD lesions. We report one case of concomitant SPD and ENL in borderline lepromatous leprosy-relapses. A 41-year-old man with the history of using multidrug therapy-multibacillary for leprosy presented with painful erythematous nodules on the trunk and extremities, accompanied by pustules on erythematous base on the face, arms, buttocks, and legs. There were thickening of both ulnar nerves with gloves and stocking hypesthesia. The bacterial index was 3+ and morphological index was 20%. Histopathological examination on the pustule revealed subcorneal pustules with exocytosis of neutrophils which supported the diagnosis of SPD. A possible immunologic mechanism has been suggested in the induction of the occurrence both SPD and ENL.

Key Words: Subcorneal pustular dermatosis, Erythema nodosum leprosum

1. Introduction

Subcorneal pustular dermatosis (SPD) is a rare and recurrent skin disorder characterized by vesicles or pustules that break easily on the base of normal or erythematous skin. The histopathological hallmark of the disease is subcorneal pustules filled with polymorphonuclear leukocytes. [1] SPD sometimes arises in conjunction with other diseases such as pyoderma gangrenosum, [2] systemic lupus erythematosus (SLE), [3] and rheumatoid arthritis. [4] To the authors' knowledge only two cases about concomitant SPD and leprosy. [5] Leprosy reaction is an acute inflammatory episode caused by an immune response to *Mycobacterium leprae* (*M. leprae*) on

the course of chronic leprosy. Two types of leprosy reaction are type I and type II. Type II leprosy reaction also referred erythema nodosum leprosum (ENL) is an immunologic reaction characterized by immune complex deposits in many tissues and organs. ^[6] This condition may a trigger to develop SPD. ^[5] Here, we reported one case of concomitant SPD and ENL in borderline lepromatous (BL) leprosy-relapses.

2. CASE PRESENTATION

A 41-year-old Indonesian man was diagnosed as leprosy in June 2010 and released from 12 months treatment with multidrug therapy-multibacillary (MDT-MB). In 2016, the

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