

Pneumocystis Jirovecii in Systemic Lupus Erythematosis

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Received May 30th, 2020; Revised July 31st, 2020; Accepted August 2nd, 2020

EDITORIAL

SLE is a chronic connective tissue disorder. It is increasing day by day. It is treated by long time use of steroids which causes immune suppression. Pneumocystis jirovecii affects the long time immune suppressed patients. SLE with diabetes patients are more vulnerable to being infected with Pneumocystis jirovecii. Nowadays there is overwhelming increase in SLE patients in Bangladesh. By sputum examination, average 2-3 SLE patients are diagnosed with Pneumocystis jirovecii in BSMMU, Bangladesh in laboratory medicine department [1-3].

Pulmonary manifestations of connective tissue diseases are a diagnostic challenge to the clinicians. It could be disease related due to immune mediate insult, facilities, pulmonary hemorrhage and pulmonary hypertension or caused by infection. Opportunistic infections with organism like pneumocystis jirovecii frequently complicate immunosuppressive status. The mechanism of immune suppression in patients with SLE who have PCP is usually multi-factorial and may be related to underlying diseases, cytotoxic therapies or malnutrition. However, the development of PCP in most patients with SLE is associated with daily administration of corticosteroids and with the development of lymphopenia. Corticosteroids cause immune suppression mainly by sequestration of CD4+T lymphocytes in the reticulo endothelial system and by inhibiting the transcription of cytokines. Corticosteroid therapy is a rare but possible independent predisposition to Pneumocystis jirovecii infection. Prolonged corticosteroid therapy is characterized by a significant immunological dysfunction [4,5].

Patients with systemic lupus erythematosus (SLE) have increased susceptibility to infection by Pneumocystis jirovecii but this condition has rarely been reported in Bangladesh. Pneumonia is due to Pneumocystis

jirovecii commonly occur in immune compromised hosts. Although it is a treatable infection, it is associated with high motility. Patient with systemic lupus erythematosus has increased susceptibility to infection by Pneumocystis jirovecii [6].

The occurrence of Pneumocystis pneumonia in patient with collagen disease on immunosuppressive therapy is not uncommon. But only a few case reports are available about this infection in active untreated collagen disorders. The diagnosis of PCP is done either by induced or spontaneous sputum analysis, or by carrying out a bronchoalveolar lavage and transbronchial lung biopsy [7,8].

Pneumocystis pneumonia is a fatal disease. It occurs mostly immune compromised patient. The patient response well to the anti-Pneumocystis treatment [9]. The clinicians should be aware that, at some point of time immunosuppressive patients can present with concurrent infections with Pneumocystis jirovecii. As it is increasing day by day so it is alarming for all. We should take precautions to prevent infection by Pneumocystis jirovecii in SLE patients [10].

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Citation: Sultana T. (2022) Pneumocystis Jirovecii in Systemic Lupus Erythematosis. Proteomics Bioinformatics, 4(2): 173-174.

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