Depression in Patients with Systemic Lupus Erythematosus

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1. Introduction

Systemic lupus erythematosus (SLE) is a multisystem, immune system, connective tissue problem with mental comorbidities, of which depression and anxiety are two normal features. The predominance of depression in patients with systemic lupus erythematosus (SLE) is higher than in the general population. Conditions Increasing HRQoL is one of the significant treatments focused on SLE. Understanding the risk factors for depression and early treatment can lead to improved treatment outcomes, not only adherence to treatment but also HRQoL. Several neurotrophic factors (NFs) and vitamin D have attracted consideration as atoms reveal instruments of the neurophysiological condition of depression. In patients with depression, decreased NF levels lead to a volumetric reduction of the hippocampus and another localized forebrain. Vitamin D deficiency is seen as a condition in desperate patients, and correction of vitamin D deficiency is generally accounted for to further develop the debilitating state.14,15 In most studies on the brain-derived neurotrophic factor (BDNF) or vitamin D for patients with depression who are not critical for comorbidity, it remains unclear whether these molecular pathological mechanisms can be applied to patients with a specific subset of the disease.2

2. Discussion

Patients with Systemic Lupus Erythematosus and poor sleep quality conditions had higher rates of depression than those who slept well. The mechanism underlying sleep disturbance in SLE patients is still unclear.4 Several previous studies have shown that there is a neural mechanism that finds that sleep deprivation can disrupt the state of brain systems...
involved in emotional states, such as the amygdala, and the anterior cingulate cortex, in areas where genes that work in circadian rhythms are not regulated. In quality of depression and positive depression problems, correlations with functional connectivity involving the lateral orbitofrontal cortex, dorsolateral prefrontal cortex, cingulate cortex, and precuneus-associated brain regions were identified as playing a very important role in the association of depression problems with poor sleep quality conditions, whereas the relationship between sleep quality with depression was problem-mediated. By this relationship is less significant. The strength of the correlation between depression and sleep quality varied between different depression measurement tools, with HAM-D being a high correlation and HADS-D being a low correlation, which is in agreement with Mirbagher et al. measurement tools that can contribute to the discrepancy between the results. There was another finding that depression had the highest association with sleep quality in SLE patients in Africa and the lowest correlation in Europe. Perhaps due to poor economic conditions and underdeveloped medical conditions in Africa, patients with SLE may not receive timely and effective treatment.

Depression has been consistently reported to have a substantial impact on the HRQoL of SLE patients, according to this study. It is noteworthy that depression was strongly associated with extreme pain/discomfort in this study. Given that pain and depression share the neurotransmitter pathways of norepinephrine or serotonin, pain can lead to depression and vice versa. Treatment of depression can reduce pain and further improve HRQoL in patients with SLE. BDNF is an NF that has attracted attention as a biomarker and target for the molecular treatment of depression. Serum BDNF levels have been reported to be reduced in patients with depression. Vitamin D has been shown to regulate NF and affect neuronal plasticity. Low vitamin D levels in patients with depression. Correction of vitamin D deficiency has been reported to improve depression. Low serum vitamin D levels are associated with high disease activity in line with previous SLE studies.

3. Conclusion
Depression in SLE patients, especially those with single/separate/isolated/grieved husband and wife status conditions, higher PGA, and extraordinary distress/distress. Patients with depression conditions have a lower quality of life, especially in the elements of self-care and stress conditions. There is a moderate relationship between sleep quality conditions in SLE patients. Patients with poor sleep quality will generally find higher levels of melancholy than those who sleep well.

4. References


