IS THERE DIFFERENCE BETWEEN MICROBIOTA IN ACTIVITY AND IN REMISSION SLE?

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BACKGROUND

Systemic lupus erythematosus (SLE) is an autoimmune disease, characterized by being multisystemic and, therefore, reaching various organs and affecting mainly young women. Its pathogenesis comprehends many factors, including the interaction between microbiota and immune system. This systematic review assessed the difference in the intestinal microbiota between patients with SLE in activity and in remission, highlighting diversity and microbiota profile.

METHODS

The search of this review was carried out from October 2020 to January 2021 using the following databases: MEDLINE via PubMed, Scopus and Embase. Five papers were included with a total of 530 participants. Patients with SLE, with no restriction of age or gender, which fulfilled the classification criteria of either Systemic Lupus International Collaborating Clinic (SLICC), American College of Rheumatology (ACR) or European League Against Rheumatism (EULAR) were included. Classifying disease in activity or remission was used the systemic lupus erythematosus disease activity index (SLEDAI).

RESULTS

Considering the differences in the microbial community constitution were observed between SLE in activity and in remission, such as the *Bifidobacterium* genus increased in stool samples from patients with SLE in remission compared with those in activity. Besides, *Ruminococcus gnavus* species was reduced, while *Streptococcus*, Lactobacillales *de Bacilli*, and *Streptococcus anginosus* species were enriched in patients with SLE in activity when compared with the group in remission.

CONCLUSION

Results suggest that although the microbiota in patients with SLE in remission and in activity present similar diversity, the microbiota profile is different between both groups.

KEYWORDS

SLE, Microbiota, Lupus.