عنوان مقاله:

Exploring RNAs Interactions and Polymorphisms in the Pathophysiology of Pemphigus: A Review

محل انتشار:

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خلاصه مقاله:

Background: Pemphigus consists of a group of rare autoimmune blistering diseases involving the skin andmucous membranes. Pemphigus pathophysiology is mediated by autoantibodies against two desmosomalcadherins, namely, desmoglein (Dsg) ۱ and (Dsg) ۳ that are present in the skin and mucosal membranes.The involvement of coding and non-coding RNAs in the pathophysiology of pemphigus has been studiedin the literature. MicroRNAs are small RNAs that could also be used as diagnostic biomarkers for someautoimmune diseases. The aim of this research was to explore the potential of this specification of someRNAs to be used as biomarkers for diagnosing pemphigus or its severity. This review discussed RNAexpressions in patients with pemphigus.Methods: A comprehensive search was performed on published studies from ۱۹۹۰ to May ۲۰۲۰ usingdifferent search engines including PubMed, Scopus, and Web of Science.Results: In general, ۳۳۵ articles were obtained according to search keywords. Then, ۴۱ relevant studieswere selected based on the inclusion and exclusion criteria. MiR-۳۳۸-۳p, miR-۴۲۴-۵p, and miR-۵۸۴-۵pwere among the miRNAs that were reported to be increased in pemphigus. The C۳ mRNA, mRNA ofCD۳۶, mRNA of CD۱۶۳, mRNA of urokinase plasminogen activator (PA), IL۲۳R mRNA, RORγt mRNA,and human leukocyte antigen G۱ (HLA-G۱) mRNA were coding RNAs that increased in pemphigus inaddition to the activity of the mRNA of tissue-type PA while HLA-G۲ mRNA decreased in pemphigus.Conclusion: Overall, this study investigated the role of Mir-۳۳۸-۳p, miR-۴۲۴-۵p, MiR-۱۲۷, miR-۵۸۴-۵p,and some mRNAs in pemphigus, and it was revealed that some RNAs may be impressive on pemphigus.More studies and clinical assessments need more information about the role of RNAs on pemphigus toobtain a better view of their mechanisms and use them as biomarkers for earlier diagnosis or probabletreatment.

کلمات کلیدی:

Pemphigus, RNA, miRNA, Cytokine, Gene expression