

## **Abstract**

Endometriosis (EM) is a gynecologic disorder characterized by the presence of endometrium-like tissue outside of normal location that affects up to 10 % of all women in reproductive age. The pathogenesis of endometriosis is not completely known. The relationship between complement and EM has already been demonstrated in some studies, indicating an important role in the pathophysiology of the disease, however, researches are scarce and sometimes controversial. The objective of this review is to bring state-of-the-art knowledge on the subject and promote better understanding of the complement system role in the pathophysiology of EM. We searched in databases up to December 2020 and found 1213 articles that were screened, from which were selected 54 articles from title and abstract. We found that there is a dysfunction of the immune system on endometriosis, including the complement system. Apparently, the complement system is dysregulated in endometriosis and several proteins of the three complement pathways presented serum levels altered in women with endometriosis compared with those without the disease. The most studied protein is C3. Future investigations on the innate immune response and complement system could offer a further understanding on the inflammatory pathogenesis of EM, which will support a new therapeutic plan.