

03287044 Peer-Review:

I read with great interest the manuscript, which falls within the aim of this Journal. In my honest opinion, the topic is interesting enough to attract the readers' attention. Nevertheless, authors should clarify some points and improve the discussion, as suggested below. Authors should consider the following recommendations: - Manuscript should be further revised in order to correct some typos and improve style. - - Accumulating evidence suggests that immune cells, adhesion molecules, extracellular matrix metalloproteinase and pro-inflammatory cytokines activate/alter peritoneal microenvironment, creating the conditions for differentiation, adhesion, proliferation and survival of ectopic endometrial cells. I would discuss these points in the light of new theories about the pathogenesis of endometriosis, referring to: PMID: 31717614; PMID: 31663401; PMID: 28571791; PMID: 28100109; PMID: 27628753. - Although peritoneal superficial lesions and ovarian endometriomas represent the majority of endometriotic implants within the pelvis, deep infiltrating endometriosis and extrapelvic endometriosis are the most challenging conditions to face off. Despite sometimes medical therapy is enough to reduce symptoms and signs (PMID: 28537213; PMID: 30074068), in a large number of patients a complete eradication, with nerve-sparing and vascular sparing approach (PMID: 27579309; PMID: 30415128) is needed to restore the normal pelvic anatomy and its functions. I would add few lines to discuss these points, referring to the abovementioned works.

Dear reviewer(s),

Thank you very much for your review and comments. I have learned a lot from it, and I seriously revised my manuscript according to your comments.

I added a few sentences to the discussion about the pathogenesis of endometriosis (The first paragraph of the discussion section), as well as related issues in the treatment of DIE (The 6th paragraph and the beginning of the 7<sup>th</sup> paragraph in the discussion section), and carefully referenced the documents you provided.

Thanks again for your valuable comments.

Best regards

Shitai Zhang