Responses to Reviewers

Thank you for considering our manuscript for publication. Your suggestions were very helpful. We have incorporated the relevant points into our revised manuscript. Please see our responses to the reviewers’ comments. The changes that were made are highlighted in red text within the revised abstract and manuscript.

Reviewer #1

1. In the summary of this article, it is described that delusional parasitosis has existed for more than one year, but in the description of the current medical history, the medical history is described as that delusional parasitosis appeared two months before the visit. The description of medical history is inconsistent. Please check and verify.

We appreciate your feedback. The patient had symptoms of delusional parasitosis two months before the psychiatric department visit. The symptoms improved after three months of treatment, and she discontinued the medication a year later. The following sentence has been added to the case summary section to clarify this. ‘These symptoms started two months before the visit to the hospital.’

2. In the "case summary", line 13, "delusional paraptosis" is not correct, "delusional paraptosis" should be changed into "delusional parasitosis"

Thank you for pointing this out. Corrections have been made in the revised manuscript.

3. Delusional parasitosis is a kind of psychosis. Why can’t it be considered that the patient is delusional parasitosis complicated with Parkinson’s disease?

Thank you for the insightful suggestion. We have concerned about this issue, too. We finalized that these symptoms are premotor symptoms of Parkinson’s disease because they differed from the known course of delusion and treatment reaction. The natural history and progression of delusional parasitosis have not been fully elucidated but may require longer treatment courses with an average of 3.5 years across all types of delusional parasitosis. In addition, more than 25% of patients may relapse on stopping treatment, with the most significant risk being within the first few months of discontinuation (Wong & Bewley 2011). Unlike other delusional disorders treatment courses, the patient’s delusions improved quickly, with no relapse. The related information is in the core tip section.

# Science editor

The manuscript elaborated a case of delusional parasitosis as premotor symptom of Parkinson’s disease. I find it a well-structured interesting study. However, is there an inevitable link between delusional parasitosis disease and Parkinson’s disease? What evidence does the author have?

Thank you for the insightful suggestion. As we mentioned in the discussion section, several non-motor symptoms including cognitive dysfunction, autonomic nervous system failure, sleep disturbance, and mood disorder can precede the development of motor symptoms by years to decades. Premotor symptoms that have been strongly associated with Parkinson’s disease include anosmia, constipation, REM sleep behavior disorder, and depression. In this case, the patient was depressive before the onset of delusional symptoms, and we assume that the patient’s psychotic symptoms were related to depression. Therefore, we recommend an evaluation of Parkinson’s disease for elderly patients with sudden onset of delusional parasitosis with other non-motor symptom of Parkinson’s disease.