

Title: *Pneumocystis jiroveci* pneumonia after total hip arthroplasty in a dermatomyositis patient: a case report and literature review

Manuscript ID: 73404

Dear Editor and Reviewers,

We are very grateful for your valuable comments and suggestions on our manuscript. Following your kind advice and reviewers' comments, we have modified and improved our manuscript. Enclosed please find the responses to the reviewers. We sincerely hope this manuscript will be acceptable to be published in *World Journal of Clinical Cases*.

Thanks very much for all your help and looking forward to hearing from you soon.

Best regards.

Sincerely,

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Response to reviewers' comments

Reviewer #1:

Comments to the author:

Reference number 1 in line 86 does not seem appropriate. It seems that anti-MDA5 ILD dermatomyositis patients are prone to develop this infection from the onset and not exactly related only to the immunosuppressive regimen they are being treated with. This interesting issue should prompt a comment by the authors in the discussion section. We suggest reducing the discussion section, mainly not focusing on the postoperative period in a repetitive manner.

1. Response: Thank you for pointing out the inappropriateness of reference number 1 in line 86. Now the reference has been corrected and updated to number 3 in line 78. We are so sorry for the incorrect use of the literature.

2. Response: As you suggested, three pieces of literature described that anti-MDA5 ILD dermatomyositis patients seem to be prone to develop PJP. Li et al. [16] reported

that 7 of 8 patients with dermatomyositis who developed PJP infection were anti-MDA5-positive. Aymonier et al. [17] reported two anti-MDA5-positive dermatomyositis patients who developed RPILD due to PJP and eventually died after receiving immunosuppressive therapy. This suggestion is appreciated. Based on the limited literature, we discuss this interesting question. (Please see the revised manuscript in line 209-215)

3. Response: Considering your kind advice, we reduced and rewritten the part of the postoperative period in the discussion section. Infection after arthroplasty is a catastrophic complication. As orthopaedic surgeons, we are very concerned with the prevention of perioperative infection. We only keep the perioperative management of glucocorticoids. (Please see the revised manuscript in line 227-239)

Special thanks for your kind comments.

Reviewer #2:

Comments to the author:

How much was the drip of hydrocortisone before anesthesia (dose, STAT/gradual through operation)? Also, two days after surgery what was the dose. There are no previous studies about PCP discovered incidentally postop and treated in introduction? In physical examination, what do you mean by exacerbation of the rash? Do you mean no rash at all, or not increasing? What do you mean by LYMPH? lymphocyte you mean?

1. Response: We have corrected it according to your advice. Hydrocortisone (50 mg) was administered intravenous drip on the day before surgery, during surgery, after surgery, and on the first day after surgery. The patient resumed 8mg of oral methylprednisolone on the second postoperative day. (Please see the revised manuscript in line 99-102)

2. Response: Considering your suggestion, we supplemented previous reports in the introduction. The occurrence of PJP in the perioperative period is rare after kidney transplantation [5], but it has not been reported after arthroplasty. That's why we report this case. (Please see the revised manuscript in line 89-90)

3. Response: We are so sorry for our inaccurate description of the physical examination. One of the typical clinical manifestations of DM is a rash. The patient had a facial rash, but this time the rash did not increase. We have corrected the description in this section. (Please see the revised manuscript in line 117-118)

4. Response: LYMPH is misleading as you suggested, we used the abbreviation ALC to define absolute lymphocyte count by consulting the literature. Sorry for disturbing your reading. (Please see the revised manuscript in line 120-121)

Special thanks for your kind comments.