

## Answering reviewers

### Reviewer 1

Re: Manuscript no. 34043 Name of Journal: World Journal of Gastroenterology Title: Endoscopy is of low yield in the identification of gastrointestinal neoplasia in patients with dermatomyositis: A cross-sectional study Short title/Running head: Kidambi, et al. Yield of endoscopy in dermatomyositis

*Reviewer's comment* By searching keywords: endoscopy and dermatomyositis in Pubmed ; it showed 41 related articles whereas 37 related articles gastrointestinal were found for "neoplasia and dermatomyositis (DM)". Thus the strength of this topic is lacking information in this field which is the area of interest to get new knowledge for clinical practice. In addition, the authors used a chart review method which is better than the code based system to identify the definite diagnosis of dermatomyositis.

Response: Thank you, we agree.

*1. The nature of retrospective, cross-sectional study cause limitation to summary the benefit of endoscopy in this group of patients. The selection bias of enrolled patients showed that only 28.8% of DM patients underwent upper endoscopy, and 41.1% of DM patients underwent colonoscopy. Other confounders eg . Epstein-Barr virus which had been reported that it related to gastric cancer in DM patients<sup>1</sup>*

Response: We have included a statement in the discussion that includes this great point.

It now reads: "Unfortunately, given the retrospective nature of the study we were unable to control for all potential confounders including the presence of Epstein-Barr virus which in a prior study was shown to be associated with gastric cancer risk."

*2. The primary outcome of the study was the yield of endoscopy to identify GI neoplasia among dermatomyositis patients. However the age range of this sample size should be concerned<sup>2</sup>. From this study, the mean age of patients at the time of endoscopy was 56.7 +/-14.4 years with a range 21-88 years. The elderly patients may contribute the higher incidence of GI malignancy which need more details. One study showed that age at disease diagnosis was a predictive factor of malignancy<sup>3</sup>.*

Response: This is a good point. We have included a statement in the discussion to address this.

It now reads: Furthermore, the age of patients in our study was relatively young which may have reduced the likelihood of identifying malignancy, as older age has been shown to be a risk factor for neoplasia in this patient population. "However, this supports our finding that the risk of neoplasia is likely similar to the general, age-

matched population and screening outside of the guideline recommendations may not be needed where an adenoma detection rate of 20-30% is expected in the United States."

3. *The result of endoscopy in this study is needed to be emphasize the whether signs or symptoms were present at the time of endoscopy. The symptoms and signs may cause higher diagnostic yield than asymptomatic DM cases as shown in this study..."Asymptomatic patients undergoing colonoscopy were more likely to have a normal exam than those with symptoms (86.3% versus 56.3%, respectively,  $p = 0.01$ )"*

Response. We agree. Table 4 shows the results of endoscopy by the presence of signs and symptoms. Table 1 shows the indications for EGD and colonoscopy. Given the relatively low number of patients in the study, our sense is that further stratifying by indication as the reviewer suggests would not be of value and would further confuse our readers.

4. *The result of no statistical differences in the yield of EGD for pre-malignant conditions stratified by age is needed to be rewrite due to the small subgroup population.*

Response: Thank you. We feel that we have not overstated our findings or conclusions and have qualified them as being in a small population size that is under powered as described in detail in our discussion section on limitations.

5. *Long-term follow up is the essential information in this group of patients for example, one study showed that the gastrointestinal disorders is found in 8.0% of DM group4 therefore the authors should add more information of long-term follow up in this cohort.*

Response: Given the retrospective and cross sectional nature, very long follow up was not possible for all patients. However, we did report the duration of disease at time of endoscopy as already written in our results section as follows: "On average, patients had dermatomyositis for 6.8 years at the time of endoscopy with a SD of 6.6 years; 39 patients (49%) had endoscopy within 5 years of their diagnosis." The literature states that the majority of patients with dermatomyositis and neoplasia are diagnosed within the first 1-5 years, so our follow up should have been sufficient in most cases.

## **Reviewer 2**

Thank you for inviting me to review the article "Endoscopy is of low yield in the identification of gastrointestinal neoplasia in patients with dermatomyositis: a cross-sectional study". This is an observational study attempting to quantify the actual risk of

GI malignancy in patients with dermatomyositis and the yield of routine screening endoscopy in this population. The study is performed by retrospective chart review after identifying patients with dermatomyositis and reviewing endoscopy results. The paper is well written with good numbers and a thorough search method and provides evidence for management of a rare condition.

Response: Thank you

*Only minor corrections are suggested. Tables and figures support the text well. Introduction: Actual numbers would strengthen this section. How common is dermatomyositis? What is the prevalence of GI malignancies and compare this to the equivalent normal population.*

Response: Excellent point. We have included a statement in the introduction on the prevalence of dermatomyositis in the general population which reads "Patients with dermatomyositis, a common idiopathic inflammatory myopathy characterized by muscle weakness and cutaneous findings affecting approximately 1 per 100,000 people are generally considered to have an increased prevalence of gastrointestinal (GI) malignancy." With respect to the prevalence of GI malignancies compared to the general population, our introduction contains a statement addressing this: "Large population-based studies [3-5] utilizing diagnostic codes for identifying dermatomyositis patients have reported a prevalence of GI malignancy as high as five percent. Additionally, a study using extensive testing for malignancy in dermatomyositis patients reported a 15% prevalence of GI malignancy."

*Discussion: again, actual numbers and comparison with the normal population would strengthen the discussion including when discussing other studies. Otherwise a comprehensive discussion. Minor typographical errors only.*

Response: We have included a statement in the discussion which addresses this. It reads "However, this supports our finding that the risk of neoplasia is likely similar to the general, age-matched population and screening outside of the guideline recommendations may not be needed where an adenoma detection rate of 20-30% is expected in the United States."