

Format for ANSWERING REVIEWERS

May 8, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 17539-review.doc).

Title: Peroral endoscopic myotomy for achalasia in patients aged 65 years or older

Author: Chenjie Li, Yuyong Tan, Xuehong Wang, Deliang Liu

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 17539

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

(1) Reply to comments from Reviewer 1:

Thank you for your appreciation and your valuable advises. We have revised our manuscript according to your comments.

① Thank you for bringing up these good questions. There are two kinds of perforations during POEM for achalasia: tunnel mucosa perforation into the esophageal or gastric cavity and serosa perforation into the mediastinum or abdominal cavity. Tunnel mucosa perforation can be successfully closed by metal clips. Serosa perforation during POEM would not cause gastrointestinal fistula or infection once the mucosa integrity is maintained and the tunnel entry successfully closed. The safety of POEM has been demonstrated by the published literature, and severe complication such as perforation, infection and bleeding are rare. In the present study, no tunnel mucosa or serosa perforation was occurred, and no gastrointestinal fistula or infection was observed.

Regarding postoperative follow-up, we do not recommend a routine CT for those without symptoms (such as obvious chest pain, fever, shortness of breath, etc) and postoperative chest X ray do not revealed any abnormality. A CT scan will be performed once the patient has symptoms, suspicious of pneumothorax, infection, fistula or abnormalities was found in the postoperative chest X ray.

② Laparoscopic Heller myotomy is proved to be safe and effective for the treatment of achalasia in the long term, but it is more invasive and with a relative high rate of complications. What's more, the surgical risk is relative high in elderly patients as they are commonly accompanied by many chronic diseases such as cardiopulmonary diseases. Most of the researchers recommend endoscopic treatment as the first-line therapy of achalasia in the elderly. Peroral endoscopic myotomy (POEM) is a novel technique for the treatment of achalasia, and it has been proved that POEM is safe and could quickly relieve the symptoms. The short and medium efficacy of POEM has been demonstrated to be exciting with the reported longest follow up duration of 3 years or longer.

③ Thank you for your remind. We have changed the word "geriatric" into "patients aged 65 years or older" in the revised manuscript.

(2) Reply to comments from Reviewer 2:

Thank you. We appreciate your good question and nice advises.

① Geriatric patients in the present study mean patients aged 65 years or older, we have changed "geriatric" into "patients aged 65 years or older" in the revised manuscript. Complications of POEM



refer to the changed patients' condition intraoperatively and/or postoperatively which may cause sufferings, injury or harm, the necessary for intervention, or prolong the hospital stay or increase economic burden. Reported complications of POEM includes early and long-term complications. Early complications mainly includes gas-related complications (subcutaneous emphysema, pneumothrax, pneumoperitoneum, etc), infection, bleeding, etc, and long-term complications mainly include reflux esophagitis.

② The criteria of enrollment in the study is: (1) The patient was diagnosed of achalasia by established methods, on the basis of symptoms, esophagogastroduodenoscopy (EGD), esophageal manometry and barium esophagram; (2) The patient is aged 65 years or older; (3) patient consent to receive POEM therapy at our hospital. Patients who could not tolerate anesthesia and those with severe cardiopulmonary disease or blood coagulation disorders were excluded from the candidates of POEM. For patients diagnosed of severe AC (Eckardt score ≥ 6 , esophageal diameter ≥ 6 cm or sigmoid-type esophagus), a full-thickness myotomy is recommended, while others circular myotomy.

③ About the statistical analysis, we have reanalyzed the data by non-parametric measures and revised it in the manuscript.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

Deliang Liu, MD, PhD
Department of Gastroenterology
the Second Xiangya Hospital of Central South University
Changsha, Hunan Province, China.
Fax: +86-0731-85295888
E-mail: liudeliang@medmail.com.cn