Letters to the editor Response

Received: 20-02-10 Accepted: 26-02-10 Doctor Rómulo Vargas Editor Colombian Journal of Gastroenterology In reference to *Endoscopic Resection of Early Gastric Cancer*

Dear Sir:

We greatly appreciate the interest and the comments about our article made by doctors Emura and Oda which were recently published in the Journal. On this subject we would like to make a few clarifications, point by point. Initially we want to clarify that our work began in 2002. Throughout our work we stuck to the study framework used at that time by Japanese authors for handling early gastric cancer (EGC).

- 1. The curability criteria for EGC that doctor Emura noted were those used in our work. Although we did not explicitly refer to vascular or lymphatic invasion, since the majority of the lesions in study patients were mucosal, and as is well known there are no vascular or lymphatic structures in the mucous layer (1) these were implicit in our study. When the tumor is confined to the mucous layer, the probability of metastasis to lymphatic nodes is smaller than 3%. This contrasts to 20% probability when the lesion invades the submucosa (2). This probably explains the results of the database of the National Cancer Center Hospital and other units in Japan that have demonstrated 5 year survival rates of 99% in EGC limited to the mucous and of 96% when the submucosa is compromised (3).
- 2. We do not share the recommendation of Emura and colleagues that EGC should always be handled through endoscopic submucosal dissection (ESD). Currently this procedure is indicated for lesions bigger than 15 mm with a high probability of resection in one piece and a low probability of metastasis to lymphatic nodes (4). Endoscopic mucous resection (EMR) is a technique accepted for curative treatment of EGC when a lesion fulfills the following characteristics (3):
 - A well differentiated, well elevated lesion smaller than 20mm.
 - A histologically well differentiated or moderately differentiated depressed lesion, without ulceration, bordering on the mucosa and without commitment of lymphatic nodes which is 10 mm or smaller (5).

For smaller lesions EMR is a minimally invasive, safe and effective technique which is an alternative to surgery (3). Moreover, it is an easy, economic procedure although it

is insufficient for larger lesions since it does not always manage to remove these lesions in a single block. As a result, it is not possible to correctly evaluate the depth of the tumor invasion (3, 4). Even so, some authors consider that ESD should be the treatment of choice even for smaller injuries (6). In spite of those views, this method is expensive, has a greater risk of bleeding and perforation, consumes more time, and it requires specialized accessories which are both difficult to obtain and not freely sold. A recent study (7) directly approached this controversy by comparing the two methods in a study of 177 patients who satisfied the requirements for mucosectomy. They were randomly assigned for either ESD or mucosectomy. The objectives of this study were to compare the rates of resection in block, complete resection, recurrence and complications. The study concluded that in small lesions of less than 15mm the two methods were comparable. The authors recommended that a mucosectomy should be performed in these kind of lesions instead of an ESD as some groups argue. Even so, ESD should be considered as a natural extension of EMR.

- 3. Extension studies were performed on all patients included in the study (Abdominal CT scans among others) before proceeding with mucosectomy. The follow-up was clinical.
- 4. Classically, the submucosa has been divided into three parts: Sm1, Sm2 y Sm3. Sm1 corresponds to the upper 500 micron histological cut of the submucosa (8-10). When a tumor invades the second part known as Sm2, treatment is surgical rather than endoscopic. This is independent of the tumor's size (3). Similarly, the mucosa has been divided into three layers. M1is the epithelium, m2 is the lamina propia, and m3 is the muscularis mucosa (10). These divisions of mucosa and submucosa have the objective of defining the risk of metastasis to lymph nodes.
- 5. We are in total agreement with Doctor Emura that patients with gastric cancer lesions of less than 15mm should have mucosal resections performed, as we shall reiterate later.
- 6. In the work two issues are very clear: minimum follow-up time was 5 years, and none of the cases submitted to mucosectomy were sm 2. There were only two sm1 cases. Even though all patients with early cancer should have endoscopies performed, this method will not always be capable of differentiating submucosal infiltration with a sensitivity of 0.7- 0.9 and a specificity of 0.6-0.91 (11). On the other hand, solely for economic reasons, it is not always possible to perform

an endoscopy in our environment. This is the reason endoscopies were performed on only 2 of our patients.

- 7. In the results and in the discussion there is a clear reference to a patient who commented that the heat generated by the loop probably eliminated the residual lesion. Probably this was the reason that no tumor was found when the surgically removed piece was thoroughly checked. The importance and impact of this finding, and what it might teach us, cannot yet be determined. However, because of the positive borders of the resected lesion, we consider that this has to be taken as the description of a case which apparently had a residual lesion but that the tumor did not present itself in the surgically removed piece. The final absence of a tumor in the resected stomach could be explained by the destruction of cells by heat. In this series there was another similar case upon which we could base on informed decision, together with the patient, not to submit her to surgical risk. The implications of these findings, and the answers to colleagues' questions, should be resolved by a study designed to investigate this question.
- The phrase, "From an oncologic point of view, we can con-8. sider that the patients are cured." should be modified to say something like, "In a 5 year follow-up, no local endoluminal recurrence diagnosable through endoscopy has been presented". We consider that this interpretation is semantic, however the concept of EGC curability is histologically evaluated. This is why it is usual for experts in this field to refer to "histological curative resections" with follow-ups which are minor compared to the ones that we use. We are surprised that Doctor Oda I questions our expression, when in his excellent multi-centric work he speaks of histological curative resections with follow-ups of only 3.2 years (12). In our study patients were followed-up endoscopically and with abdominal CT scans even though there currently exists universal acceptance that endoscopic resection "cures" EGC.

Finally, we want to indicate that as more endoscopies are performed on patients with dyspepsia, more patients with early cancer are likely to be diagnosed. This will force us to handle these cases endoscopically. If the lesion size is less than 15mm, as demonstrated by our work, then it will be valid to perform a mucosectomy strictly following the technique that assures good results. If the lesion is bigger than 15 mm, it will be handled through ESD. We consider that, despite the existence of groups which are beginning to praise ESD for treatment of EGC with lesions sizes smaller than 15mm, the controversy continues. Both techniques require qualified personnel. For this reason our scientific societies should begin to implement support for training centers for therapeutic endoscopy.

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