

Towards the Standardization of Gastric Dysplasia and Early Gastric Cancer Histological Diagnosis

Luca Saragoni*

Department of Pathology, G.B. Morgagni-L. Pierantoni Hospital, Forlì, Italy

As the history of the pathological diagnosis of Gastric Dysplasia (GD) and Early Gastric Cancer (EGC) clearly shows, Western pathologists and their Japanese counterparts have always differed over the classification of the two categories. What in the West is identified as GD is often considered as EGC in Japan.

Since 1997, when Schlemper et al. approached the topic of the differences in diagnostic criteria for gastric carcinoma between Japanese and Western pathologists [1], a lot of efforts have been made to try and solve the problem of the lack of standardization. Some authors [2] showed that the sensitivity of GD diagnosis was higher in Western Countries, while that of EGC was higher in Japan. According to their findings, Western pathologists obtained a higher specificity than Japanese pathologists did (97% vs. 74.5%) in the diagnosis of carcinoma.

The Vienna Classification of Gastrointestinal Epithelial Neoplasia was the first attempt at the standardization of the different histologic criteria dividing East and West [3]. The most important advantage of the Vienna Classification is that the various categories are associated with different recommendations for further therapeutic indications. Yet, one of its more critical points is the differentiation between non-invasive and invasive neoplasia, which has been followed by a controversial discussion about the criteria for invasion into the lamina propria. Given this drawback, Stolte suggested a revised version of the Vienna Classification, which has grouped the non-invasive high grade neoplasia and intramucosal carcinoma under the same category [4]. This “new” subclassification should have allowed the eventual standardization of the diagnoses between Eastern and Western pathologists for both lesions, which share the same endoscopic treatment. Despite Stolte’s attempt, the introduction of the recent version of the WHO Classification in 2010 has contributed to a further separation between the intra-epithelial neoplasia/dysplasia and the intramucosal invasive neoplasia/intramucosal carcinoma, representing “de facto” a backward step in the effort to homogenize the diagnostic criteria between East and West [5].

Even if, the use of different histological criteria for the definition of GD and EGC by Western and Japanese pathologists is still a divisive issue, the introduction of magnifying endoscopy with narrow-band imaging can help pathologists in performing a better differential diagnosis between dysplastic lesions and early cancers. In fact, the tight correlation between this kind of endoscopic diagnostic tool and histology has been recently demonstrated by some authors [6].

In conclusion, although many efforts have been made in order to reach an International agreement and standardization, there is still a long way to go because the diagnostic criteria for carcinoma vary widely. In the meantime, a wide range agreement on the treatment of patients affected by high grade dysplasia and intramucosal carcinoma has been reached, offering a mini-invasive endoscopic procedure. The need, now, is to find a common language.

References

1. Schlemper RJ, Itabashi M, Kato Y, Lewin KJ, Riddell RH, et al. (1997) Differences in diagnostic criteria for gastric carcinoma between Japanese and western pathologists. *Lancet* 349: 1725-1729.
2. Lauwers GY, Shimizu M, Correa P, Riddell RH, Kato Y, et al. (1999) Evaluation of gastric biopsies for neoplasia: differences between Japanese and Western pathologists. *Am J Surg Pathol* 23: 511-518.
3. Schlemper RJ, Riddell RH, Kato Y, Borchard F, Cooper HS, et al. (2000) The Vienna classification of gastrointestinal epithelial neoplasia. *Gut* 47: 251-255.
4. Stolte M (2003) The new Vienna classification of epithelial neoplasia of the gastrointestinal tract: advantages and disadvantages. *Virchows Arch* 442: 99-106.
5. Bosman FT, Carneiro F, Hruban RH, Theise ND (2010) WHO Classification of Tumours of the Digestive System, Fourth Edition, IARC Press: Lyon.
6. Maki S, Yao K, Nagahama T, Beppu T, Hisabe T, et al. (2013) Magnifying endoscopy with narrow-band imaging is useful in the differential diagnosis between low-grade adenoma and early cancer of superficial elevated gastric lesions. *Gastric Cancer* 16: 140-146.

*Corresponding author: Luca Saragoni, Department of Pathology, G.B. Morgagni-L. Pierantoni Hospital, Forlì, Italy, E-mail: l.saragoni@ausl.fo.it

Received May 06, 2013; Accepted May 22, 2013; Published May 24, 2013

Citation: Saragoni L (2013) Towards the Standardization of Gastric Dysplasia and Early Gastric Cancer Histological Diagnosis. *J Gastroint Dig Syst* S12: 008. doi:10.4172/2161-069X.S12-008

Copyright: © 2013 Saragoni L. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.