

## Lessons from Interval Gastric Cancer: Read between the Lines

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See "Clinicopathologic Characteristics of Interval Gastric Cancer in Korea" by Mi Sung Park, et al. on page 167, Vol. 9. No. 2, 2015

The term "interval gastric cancer (IGC)" is probably used only in Far East countries such as Korea and Japan where nationwide screening programs for gastric cancer has been established. For Western doctors, interval colorectal cancer may be a more familiar corresponding term.<sup>1</sup>

Quality of colonoscopy has been reported to be the most important factor for the development of interval colorectal cancer.<sup>2</sup> In this Korean study, the authors reported location of the lesion and tumor differentiation as two predictors of IGC.<sup>3</sup> IGC was more common in tumors located at the lower body of the stomach and in tumors with undifferentiated carcinoma. Previous reports revealed that IGC was more common in upper gastrointestinal series screening groups compared to endoscopy groups.<sup>4</sup> To sum these results, meticulous examination during endoscopy seems to be mandatory to reduce IGC. However, additional studies are anticipated to clarify the reasons why tumor location and differentiation affected the development of IGC. Although there has been no definite evidence, it is plausible that undifferentiated carcinoma grows rapidly compared to differentiated carcinoma, which resulted in increased proportion of IGC. As for the location, the authors did not describe how many pictures per person were analyzed and couldn't analyze whether blind spots were more common in the lower body of stomach.

IGC includes both missed lesions and latent lesions. Missed lesions can be decreased with meticulous examination such as chromoendoscopy and/or new image-enhanced endoscopy with biopsy, while development of latent lesions may be inevitable. Pretreatment before endoscopy with proteolytic enzymes is another option to improve the visibility of endoscopy.<sup>5</sup> Quality control is also an issue. Experience of endoscopists might

influence the development of IGCs and endoscopists should be vigilant to avoid blind spots. Currently, the Korean Society of Gastrointestinal Endoscopy recommends eight cuts as standard pictures for esophagogastroduodenoscopy (EGD) which includes only four images of the stomach. This was initially suggested by the European guidelines.<sup>6</sup> However, gastric cancer is more common in Korea than in Europe and new guidelines for standard picturization during EGD should be established in the near future.

We also should reconsider whether the Korean national cancer screening program consisting of biennial endoscopy is optimal in Korea. When screening was performed within 2 years, half of the lesions might be treated by endoscopic resection.<sup>7</sup> However, debates on the interval of screening endoscopy still exists, especially in patients with severe intestinal metaplasia (IM).<sup>8</sup> The authors of this article described that background atrophy and IM of the stomach were related to development of IGC. It is plausible that unevenness of gastric mucosa in IM prevents the endoscopists' from detecting minimal and/or minute gastric cancer.<sup>9</sup>

In conclusion, meticulous examination by endoscopy might reduce the development of IGC in Korea. Educational programs to improve the quality of endoscopists should be continued and improved.

### CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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