The diagnosis of reflux esophagitis has been facilitated by the introduction of endoscopic imaging at high resolution. Recently, minimal changes at the squamo-columnar (SC) junction have attracted clinical interest; these are defined by endoscopists as white-colored changes to the esophageal mucosa near the SC junction. This finding is commonly accepted for inclusion in a modified LA classification “grade M (minimal change)”, as part of the spectrum of reflux esophagitis in Japan [1]. The clinical implications of such minimal changes are considered significant [2,3]. Because reliable detection of the white-color change of the esophageal mucosa is difficult, the consistency of diagnosis varies among endoscopists. Recently, the autofluorescence imaging (AFI) videendoscopy system (Olympus Corp., Tokyo, Japan) was developed for diagnosis of hyperplasia and inflammation of the gastrointestinal tract. Here, we investigate endoscopically detectable differences between normal controls and the white-colored esophageal mucosa of reflux esophagitis grade M using white light imaging (WLI) endoscopy and AFI. Fourteen cases (normal esophagus, n = 8; minimal change, n = 6) were investigated with WLI and AFI simultaneously. Esophageal mucosa recognized as normal by WLI appears green by AFI, whereas WLI-detected white-colored esophageal mucosa appears pink by AFI (Fig. 1). Histologic examination has shown that the epithelium is thickened in white-colored mucosa [4], which may lead to decreased autofluorescence in the lesion. By using AFI, we can easily distinguish the white-colored from the normal mucosa. It is therefore suggested that AFI is useful for the detection of minimal changes, appearing as pink-colored esophageal mucosa in reflux esophagitis grade M.

Endoscopy_UCTN_Code_CCL_1AB_2AC_3AB
References

1 Hongo M. Minimal changes in reflux esophagitis: red ones and white ones. J Gastroenterol 2006; 41: 95 – 99

Bibliography

Endoscopy 2008; 40: E172
© Georg Thieme Verlag KG Stuttgart - New York - ISSN 0013-736X

Corresponding author
S. Watanabe, MD, PhD
Department of Gastroenterology
Juntendo University School of Medicine
2-1-1 Hongo
Bunkyo-ku
Tokyo 113-8421
Japan
Fax: +81-3-3813-8862
sumio@med.juntendo.ac.jp