Posters

P-211 Revisit of endoscopic ultrasonography to evaluate depth of invasion of early gastric cancer before endoscopic mucosal dissection compared with conventional endoscopy

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Introduction: Endoscopic submucosal dissection (ESD) is currently the standard practice for a subgroup of patients with early gastric cancer (EGC) in Korea and Japan. For the therapeutic decision of ESD or laparoscopic gastrectomy, it is very important to determine the depth of tumor invasion. Endoscopic ultrasonography (EUS) has been used as a reliable method for predicting the invasion depth of EGC. However, recent studies showed that conventional endoscopy (CE) provided reliable accuracy for T staging in EGC (73-82%) using the characteristic endoscopic criteria of the tumor invasion, which is not different with EUS. Moreover, recent meta analysis showed that EUS only has a relatively low accuracy for staging the depth of invasion in EGCs and may be not indispensable in the staging of EGCs. However, there will be some technical problems using EUS. Our aim of study is to compare the diagnostic yield of EUS using contact method of catheter probe with CE using characteristic endoscopic criteria.

Methods: We evaluated the consecutive patients with EGC who underwent CE and catheter-based EUS using contact method before ESD or laparoscopic gastrectomy. Endoscopic images according to the defined CE criteria (Choi J, Gastrointest Endosc 2011; Abe S, Gastric Cancer 2011) and EUS images were reviewed (Kida M, Endoscopy 1998) independently for depth of invasion. Their results were compared with final pathologic depth of cancer.

Results: Fifty two patients with EGC were enrolled (33 males, 66 ± 9 years). Final pathology revealed 38 mucosal invasion, 10 submucosal invasion, 2 proper muscle invasion and 1 subserosal invasion. Diagnostic accuracy of EUS was significantly higher than that of CE (88.5% vs. 71.2%, p < 0.05). Misdiagnosed cases by EUS were 5 over-diagnosed cases because of presence of fibrosis or gastritis cystica profunda and 1 under-diagnosed case of focal subserosal invasion. CE showed 8 overdiagnoses and 7 underdiagnoses.

Conclusion: EUS using contact method of catheter probe may have a more accurate diagnostic yield than CE to assess the depth of invasion in EGC.