中文題目：內視鏡超音波用於腸道之布隆納氏腺(Brunner’s glands)增生症及缺陷瘤的診斷及治療

英文題目：Endoscopic Ultrasonographic and Clinicopathological Features of Brunner’s Gland Hyperplasia and Hamartomas Diagnosed and Removed by Endoscopic Management

作　　者：吳宜樺[1]，黃文信[1]， 楊其穎[1]， 張凱博[2]

服務單位：[1]中國醫藥大學附設醫院消化內科部，[2]中國醫藥大學附設醫院病理科部

Background: Brunner’s glands (BGs) are branched acinotubular glands and they are most common in the duodenal bulb. The size of BG hyperplasia lesions is up to 5 millimeters (mm) and even 10 mm according to the different reports. Larger lesions were called BG hamartomas, adenomas, or brunneromas. Brunner ’s gland hamartoma, a rare gastrointestinal subepithelial lesion, located almost between the pylorus and the ampulla of Vater, with an unknown pathogenesis and prevalence, is widely recognized as a benign lesion. Its clinical presentation varies greatly. Histologic diagnosis is difficult without surgical or endoscopic resection. The EUS characteristics of Brunner’s gland hamartomas were only reported on few sporadic case reports because of its rarity. The differential diagnosis and optimal treatment remain a challenge to endoscopists. Our study is to evulate the characteristics of the proliferative lesions of BG and examined their association with H. pylori.

Method: This retrospective study included patients who underwent an upper gastrointestinal endoscopy in the endoscopy unit of our hospital between 2005 and 2021. We reviewed the patient characteristics, clinical presentation, outcomes of treatment, and endoscopic and EUS findings of Brunner ’s gland hyperplasia and Brunner ’s gland hamartoma, which were diagnosed by endoscopic resection or biopsies.

Results: Fifty-nine patients (38 men, 21 women; age range 18-78, average 54.38 years) were evaluated by EGD at our institute beforeundergoing endoscopic removal of the lesions. The initial presentations were abdominal pain, followed by GI bleeding and dyspepsia. Lesions were mostly sessile, but one was pedunculated in contour, which were located in duodenalbulb (76%), junction of 1st and 2nd portion (24%) and pylorus (1%). Its size ranged 10 mm to 30 mm, average 14 mm. Additionally, H.

pylori was detected in Brunner ’s gland hyperplasia and Brunner ’s gland hamartoma in our study at rates of 65.6%. Initial endoscopic biopsies revealed Brunner’s gland hamartoma in 2 of 59 lesions, Brunner’s gland adenoma in 1 of 59 lesions, and others were Brunner’s gland hyperplasia. There were thirteen of all the lesions could be safely removed by endoscopic resection after EUS confirmation of the layer origin within the submucosa. Of the EUS studies, all were located in the second and third sonographic layers, with features of indistinct outer margins. Internal echo texture of the lesions appeared to be hyperechoic/heterogeneous, and mixed/heterogeneous. All were diagnosed pathologically with hamartomas or hyperplasia. One lesion revealed Brunner’s gland hamartoma with dysplasia. Two lesions had anechoic foci. The thirteen lesions were successfully removed endoscopically (12 by polypectomy or EMR, and 1 by ESD). One patient with post-EMR bleeding needed endoscopic hemostasis therapy. One Brunner’s gland hyperplasia was located at the ampulla of Vater and was successfully removed by endoscopic papillectomy.

Conclusion: The EUS features of Brunner’s gland hamartomas were hyper/mixed and heterogenous echogenicity, 2nd and 3rd layers origins, indistinct margins, and anechoic foci in some lesions, which provide more valuable information before tissue proof and help differentiation from other subepithelial lesions. Endoscopic resection is a safe and feasible method for the treatment of Brunner’s gland hyperplasia and Brunner’s gland hamartomas, especially concerning one case illustrating malignant potential due to dysplasia.