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CASE REPORT

브루너샘의 낭종 위에 발생한 십이지장 선종

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Sporadic Non-ampullary Duodenal Adenoma Overriding the Cystic Dilatation of Brunner's Gland Hyperplasia

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Sporadic non-ampullary duodenal adenoma is uncommon and found incidentally during endoscopic examinations. Brunner's gland hyperplasia is commonly encountered during endoscopic examinations. Adenomas arising from Brunner's gland hyperplasia originate from the glandular cells, and the surface epithelia are usually intact. Little has been reported on adenomas originating from the surface epithelium that overrides Brunner's gland hyperplasia. Here, we report a case of a sporadic non-ampullary duodenal adenoma overriding the cystic dilatation of Brunner's gland hyperplasia. **(Korean J Gastroenterol 2017;70:141-144)**

Key Words: Brunner's gland hyperplasia; Adenoma; Endoscopic resection

INTRODUCTION

Sporadic non-ampullary duodenal adenoma is uncommon and generally found incidentally during endoscopic examinations. One previous study in Korea showed that the incidence of duodenal adenoma was 0.03% among patients who visited the gastroenterology department.[1] Most duodenal adenomas are in sessile and slightly elevated than the normal mucosa.[1]

Brunner's gland hyperplasia is commonly encountered during endoscopic examinations, and 60% tend to show cystic dilatation.[2] Although adenomas arising from Brunner's gland hyperplasia have previously been reported, little is known about these lesions, including its malignant tendencies. Adenomas arising from Brunner's gland hyperplasia originate from the glandular cells, and the surface epithelia are usually intact. To the best of our knowledge, there has been little to no previous reports on adenomas originating from the surface the epithelium that overrides Brunner's gland hyperplasia. Here, we report a case of a sporadic non-ampullary duodenal adenoma overriding the cystic dilatation of Brunner's gland hyperplasia, which was managed successfully via endoscopic resection.

CASE REPORT

A 50-year-old male patient was referred to Incheon St. Mary's Hospital to have duodenal adenoma removed. He did not complain of any gastrointestinal symptoms and his labo-

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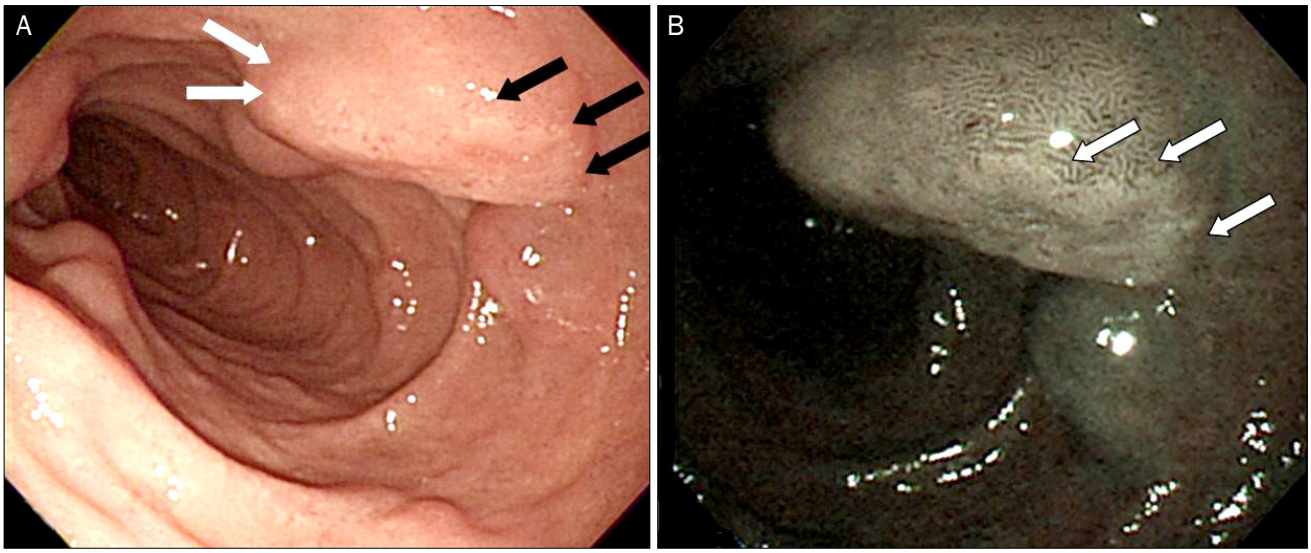

Fig. 1. Duodenoscopy of the lesion. (A) A nodular lesion (black arrows) is overriding a cystic lesion (white arrows). (B) Narrow band image shows more discrete lesion with different pit patterns (white arrows) compared with background cystic lesions.

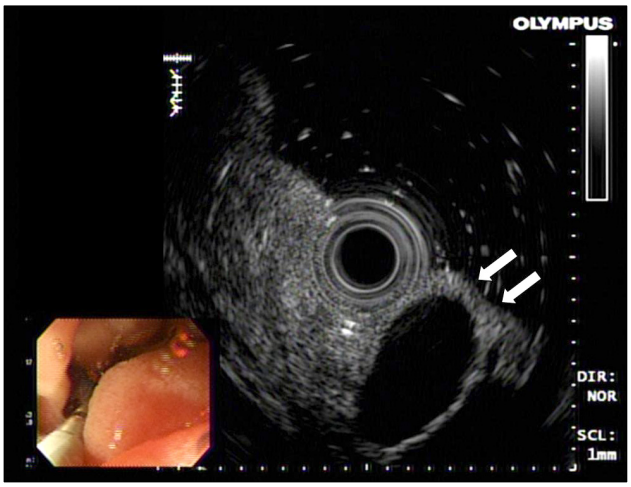

Fig. 2. Endoscopic ultrasound of the lesion. A hypoechoic homogenous lesion is located at the submucosal layer (white arrows).

ratory tests were within normal limits. Duodenoscopy showed an elevated lesion overriding a cystic lesion at the second portion of the duodenum (Fig. 1). A biopsy was performed and a histologic examination revealed low grade dysplasia. Endoscopic ultrasound showed a hypoechoic, homogenous lesion at the submucosal layer, but mucosal lesions were not clearly defined (Fig. 2). Consecutive colonoscopy showed no definite abnormality.

Since the lesion was overriding a cystic lesion, endoscopic mucosal resection was performed without submucosal injection, and the lesion was removed successfully without any complications (Fig. 3). The lesion was 1.5x1.2 cm and the resection margin revealed no tumor residue. Histopathology showed a high grade dysplasia overriding Brunner's gland hyperplasia (Fig. 4). The dysplastic lesion did not originate from the Brunner's gland, but rather from the epithelial layer of duodenal mucosa.

DISCUSSION

Sporadic non-ampullary duodenal adenomas are uncommon and present as solitary sessile or flat lesions.[3] This term is used when it arises in patients without polyposis syndrome. The mean age at diagnosis is usually in the seventh decade, and the incidence is about equal between men and women. Among those with thsporadic non-ampullary duodenal adenomas, 80-90% are found in the second part of the duodenum, with a mean size ranging from 13 to 29 mm. Most lesions are asymptomatic and clinically insignificant.[3-6]

Brunner's gland hyperplasia is a benign lesion of the duodenum and is usually found incidentally during endoscopic examinations. Usually, they are small in size, but sometimes large enough to manifest clinical symptoms, such as bleeding and obstruction.[7] Brunner's gland are located in the submucosal layer. Adenomas of Brunner's gland are defined as glandular hyperproliferation extending beyond the muscularis mucosae.[8]

A unique point with respect to this case is that the adenoma overrode a cystic change of Brunner's gland hyperplasia. The

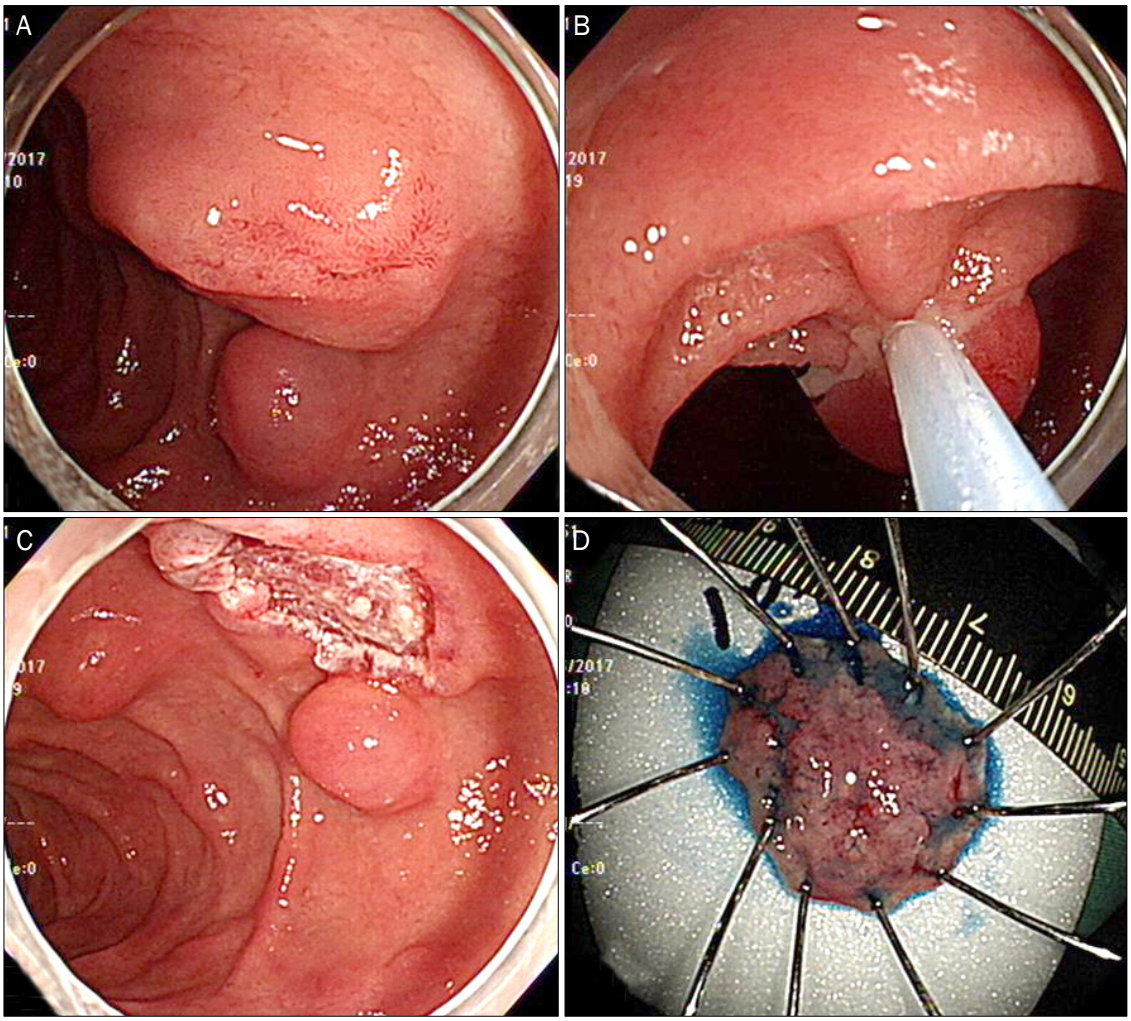

Fig. 3. Endoscopic mucosal resection of the lesion. (A) The lesion is located at the second portion of the duodenum. (B) Snaring was performed. (C) The lesion was removed completely. (D) The lesion was measured as 1.5×1.2 cm.

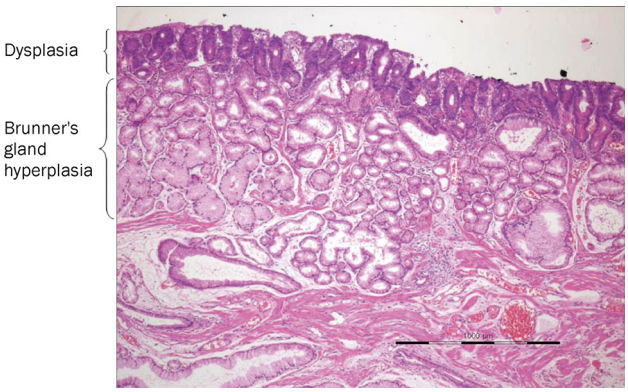

Fig. 4. Histopathology of the lesion (H&E stain, ×40). Adenoma is overriding the Brunner's gland and the two lesions are separated.

dysplastic lesion did not originate from the Brunner's gland, but rather from the epithelial layer of duodenal mucosa. Fortunately, the dysplastic lesion was located on the cystic change of the Brunner's gland, and it was removed successfully without submucosal injection during endoscopic resection. In this case, we believe that a meticulous examination by an endoscopist from the primary clinic found this lesion. If the endoscopist had not focused on a nodular flat lesion overriding cystic lesion, the lesion would have likely not been found.

In conclusion, one lesion can override another lesion. Meticulous endoscopic examination should be performed despite a cystic lesion. This can prevent further progression of the lesion and prevent drastic outcomes.

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