Case Report / Olgu Sunumu

Duodenal White Spots Mimicking Intestinal Candidiasis

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ÖZET

Son yıllara kadar duodenal beyaz beneklerden non-spesifik lezyonlar olarak bahsedilmekteydi. Henüz duodenal beyaz benekler hakkında yeterli çalışmalar olmasada ayrı bir sendrom olarak tanımlanmaya başlanılmıştır. Biz burada intestinal kandidayı taklit eden çok sayıda duodenal beyaz beneklerin olduğu bir vakayı sunuyoruz. Klinik olarak ve endoskopik görünümü ile bize duodenal kandidayı düşündürmesine rağmen histopatolojik olarak şiddetli duodenit olduğu görülmüştür. PAS boyamada da kandida lehine bulguya rastlanılmamıştır. Endoskopi sonrası hastaya 30 mg lansaprazol ve bizmit salitsilat tedavisi uygulandı. Üç ay sonra yapılan kontrol endoskopisinde duodenal lezyonların kaybolduğu görüldü. Duodenal beyaz benekler ayrı bir sendrom olarak tanımlanmaya başlamıştır. Endoskopi esnasında etyoloji dikkatle araştırılmalıdır. Bazen lezyonun görünümünden ayırıcı tanı yapmak oldukça zor olabilir ve bu vakalarda histopatolojik inceleme hem etyolojinin tespit edilmesinde hem de ayırıcı tanıda faydalı olabilir.

ABSTRACT

Duodenal white spots are mentioned in these nonspecific lesions until recently. Although there is not enough studies about duedonal white spots yet; these lesions described in a separate syndrome. Here now we reported a case that we diagnosed multiple Duodenal white spots mimicking intestinal candidiasis. Clinical manifestation and endoscopic appearance of lesions gave rise to thought intestinal candidiasis histopathological examination revealed us several duodenitis. There was no evidence of fungal infection in PAS staining. Early after endoscopy patient took treatment of Lansoprozole at the 30 mg dose and bismuth salicylate. Patients compliant declined and control endoscopy exposed white duodenal spots cleared away three months later. Duodenal white spots are becoming to be designated as a separate disease even a syndrome. Etiology of duodenal white spots must be determined carefully during endoscopy. Sometimes it is difficult to make the correct diagnosis by appearance of lesion; in such cases histopathological examination can be useful both differential diagnosis of disease and determination of etiological factor.

Key words: Duedonal white spot, intestinal candidiasis, gastritis.

INTRODUCTION

Duedonal diseases have a wide range that is affected by external factors and inner factors. Helicobacter pylori, drugs, increased gastric acid secretion, viral, fungal and bacterial infections, malignancies, inflammatory gastrointestinal disease such as Crohn's disease, Celiac disease, ulcerative colitis, and autoimmune gastritis are listed in these factors(1). The most common diagnostic method for duodenal diseases is upper gastrointestinal endoscopy. Specific sign and appearance for each of these diseases are described. Endoscopist can come across different and nonspecific lesions during endoscopy procedure. Duodenal white spots are mentioned in these nonspecific lesions until recently (2). Although there is not enough studies about duedonal white spots (DWS) yet; these lesions described in a separate syndrome. The name of the syndrome is controversial. It is likely to be Duedonal white spots syndrome (DWSS) or white the point type duodenitis. Because of DWSs caused duodenal inflammation differential diagnosis can be confusing (3). Here now we reported a case that we diagnosed multiple DWSs mimicking intestinal candidiasis. Clinical manifestation and endoscopic appearance of lesions gave rise to thought intestinal candidiasis histopathological examination revealed us several duodenitis.

CASE REPORT

A 67-year-old man admitted the general surgery department of the hospital with abdominal pain, loss of appetite and nausea. Initial physical examination of patient was normal except epigastric tenderness. Blood sample was taken and laboratory results output as Hemoglobin 10,3 mg/dl, white blood count $10,9x10^3$ /dl, biochemical parameters were normal including carcinoembryonic antigen, alpha-fetoprotein and CA 19-9. C reactive protein level was measured 54,2 mg/dl ten times higher than normal range. Patient underwent upper gastrointestinal system endoscopy next day. Multiple DWSs determined during endoscopy. Spots were located in bulbar side of duodenum and separately scattered. Most of spots colored white but some of them had yellow to gray patches due to bile dye. Diameters of spots were between 2 mm to 7 mm measured by eye sense (Figure 1a, 1b). Some of the spots tended

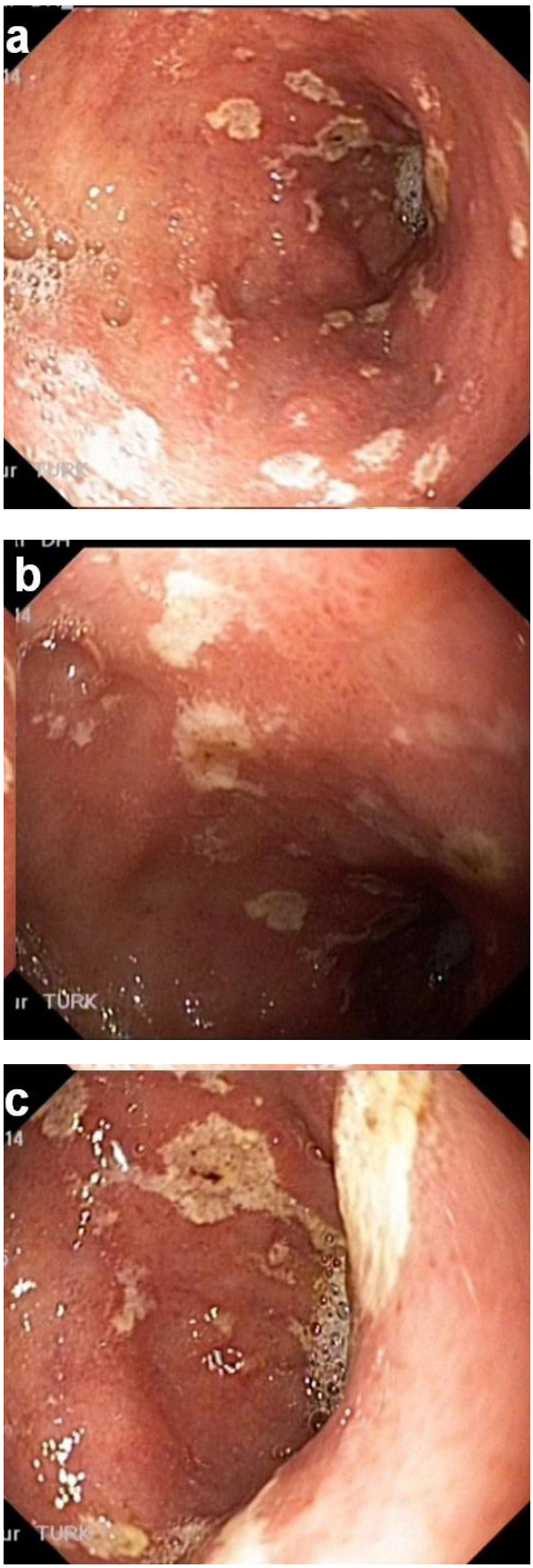

Figure 1.
Endoscopic view of lesions located duodenal bulb. a. Multiple small separated white spots b. Color of the spots changed white to gray c. Some of spots merged and composed plaque formation.

Figure 1.
Endoscopic view of lesions located duodenal bulb. **d.** Because of bile dye central of plaque colored different.

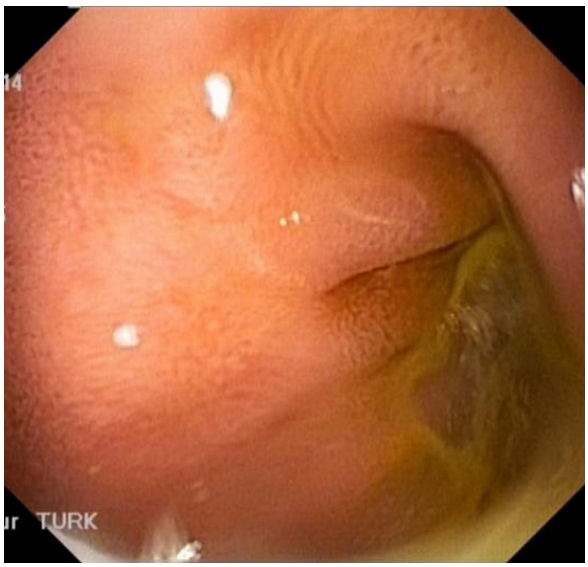

Figure 3.
Control endoscopy revealed normal duodenal bulb after treatment.

to merger and seem like plaque like formation (Figure 1c, 1d). None of the spots observed rose from the mucosa. Lesions were remained after washing. Appearance of lesion, patient's age and poor condition, accompanying esophageal lesions (Figure 2) brought us suspect of intestinal candidiasis. To confirm the diagnosis multiple endoscopic biopsies was taken. Histophatological examination of initial examination showed us several duodenitis. Chronic inflammatory changes in villous stroma including lymphocytes, plasma cells and monocytes determined in Hematoxylin Eosin staining. PAS staining was performed because of clinical suspect of intestinal candidiasis. There was no evidence of fungal infection in PAS staining. Helicobacter pylorus was not determined in Giemsa staining. Early after endoscopy patient took treatment of Lansoprozole at the 30 mg dose and bismuth salicylate until biopsy result reported. As a result of histopathological examination resulted without intestinal candidiasis treatment did not change and continued during three months. Patients compliant declined and control endoscopy exposed white duodenal spots cleared away (Figure 3). This case is reported after patients informed consent.

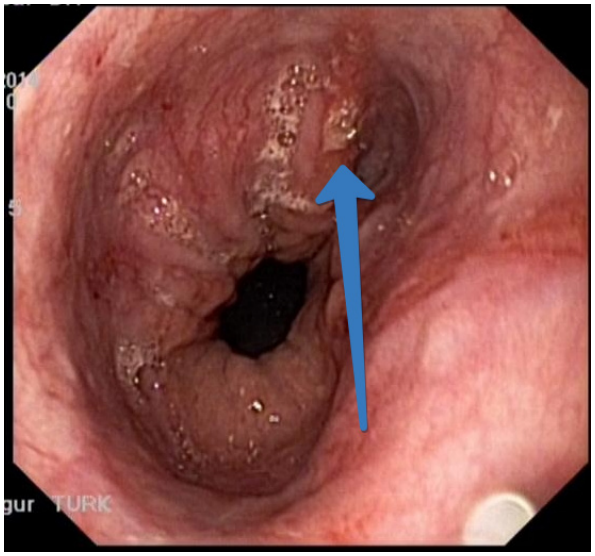

Figure 2. *A single white spot located in gastro esophageal junction. (Blue arrow).*

DISCUSSION

Gastrointestinal disorders have a wide range from benign to malign diseases. Most of the benign diseases are associated with inflammatory responses. The most common inflammatory disease of duodenum is duodenitis. DWSs are diagnosed in nearly 3% of patients during endoscopy. The most responsible reason of DWSs is chronic duodenitis. Majority of duodenitis are due to helicobacter pylori infection. We could not find any large study reported Helicobacter pylori incidence in DWSs. Tas et al. reported 45,1% of patients with duodenal separated white spots had Helicobacter pylori infection (2). Reason of duodenitis is rarely other infective pathogens. Drug is the more common reason for non-infection duodenitis. Other suspected etiology is parasitic infections; especially Biyikoglu et al. reported that

14% of 107 patients with scattered white spot in duodenum are cause of giardiasis infection (1). On the other hand Tas et al. reported there was not any giardiasis in their study group. Intestinal lymphangiectasia is reported as a cause of duedonal spots at the frequency of 44-57% (1, 2). DWS usually determined in proximal duodenum (4). Probably it is not associated with mucosal erosion. There is not enough knowledge and study in the literature. DWSS is newly mentioned in Japanese literature. Patients with DWSs are usually presented with abdominal pain or discomfort, nausea and changes of appetite. Gastritis, peptic ulcer, chronic cholecystitis, pancreatitis and cholelithiasis could accompany to DWSS. Commonly definitive diagnosis was made during endoscopy. DWSs are multiple white to gray colored, sometimes fluffy, do not change with washing, may seen in plaque like structure lesions(5). In differential diagnosis inflammatory polyps of duodenum, duodenal ulcer; bacterial, viral and fungal infections must be in mind. In the most of cases the endoscopic diagnosis is not difficult but sometimes intense inflammation and combined plaques and spots can cause of misdiagnosis (6).

Intestinal candidiasis is most frequent intestinal fungal infection. Incidence of candidiasis is increased in impairment of immune system but also can be seen in normal human being. Other disease such as diabetes mellitus, malignancies, deficiency of immune system and alcoholism could cause to candidiasis (7). The most common site of intestinal candidiasis is esophagus. Gastric colonization of Candida is more seen in gastric mucosa along the digestive tract (8). Sometimes in advanced infection of intestinal candidiasis can result with unexpected complications such as perforation, intestinal hemorrhage, stenosis in pylorus or esophagus, tumor-like masses (7). Intestinal candidiasis appears plaque-like in mucosa, multiple white to gray fluffy lesions (9).

DWSs are becoming to be designated as a separate disease even a syndrome. Etiology of DWSs must be determined carefully during endoscopy. The basis of the treatment bases on prevention of gastric mucosa and treatment of factor pathogen. In our case; initial endoscopy preoccupied us intestinal candidiasis because of mucosal plaques located all over the duodenal bulb. Lesions did not change after washing. They were differentiated from separated white spots by size, location and plaque-like formation. Lesions seem like early non-complicated and opportunist intestinal fungi. We performed duedonal biopsy to make histophatological diagnosis. Biopsy resulted as severe chronic duodenitis without Helicobacter pylori infection.

In conclusion lesions that encountered during endoscopy procedure must be evaluated carefully. Sometimes it is difficult to make the correct diagnosis by appearance of lesion; in such cases histopathological examination can be useful both differential diagnosis of disease and determination of etiological factor.

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