Gastric and duodenal pseudomelanosis: A propos of two cases

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INTRODUCTION

Gastric and duodenal pseudomelanosis is an uncommon condition characterized by pigment deposition within macrophages in the lamina propria of the mucosa. It is usually associated with oral iron ingestion, but also with antihypertensive drugs and diseases such as blood hypertension, chronic kidney failure, gastrointestinal bleeding, chronic heart failure, and diabetes mellitus.

CASE REPORTS

Case report 1

A 60-year-old male with blood hypertension, ischemic heart disease, idiopathic retroperitoneal fibrosis with chronic splenic thrombosis, chronic kidney failure, and iron deficiency anemia. He was on treatment with doxazosin, atenolol, hydralazine, ferrous sulfate, furosemide, and acenocoumarol, among others. An upper digestive endoscopy (UDE) was ordered to rule out esophageal-gastric varices, which identified multiple millimetre coffee-colored lesions in the gastric body, duodenal bulb, and second duodenal portion (Figs. 1 and 2). Histopathology revealed the presence of blackish-brown deposits within lamina propria macrophages (Fig. 3).

Fig. 1. Endoscopic view of pseudomelanosis in the duodenal bulb.

Fig. 2. Endoscopic view of pseudomelanosis in the second duodenal portion.
Case report 2

A 78-year-old male with blood hypertension, diabetes mellitus, ischemic heart disease, heart failure, peripheral vascular disease, iron deficiency anemia, and chronic kidney failure. He was on treatment with furosemide, hydralazine, ferrous sulfate, acetylsalicylic acid, lisinopril, carvedilol, doxazosin, and insulin. He underwent UDE for anemia, which identified blackish longitudinal stripes in the gastric antrum and multiple dark point-like spots in the duodenal bulb, and second duodenal portion. Histopathology confirmed the presence of iron deposits using Perls’ technique (Fig. 4).

Fig. 3. Histopathology of the gastric mucosa. Arrows point to pigment deposition in the mucosal lamina propria.

Fig. 4. Histopathology of the gastric mucosa. Arrows point to areas positive for Perls stain.

DISCUSSION

Duodenal pseudomelanosis is more common than gastric pseudomelanosis. We found around 50 case reports of the former in the literature versus only 5 of the gastric variant (1-5). Differential diagnosis includes melanoma, Peutz-Jeghers syndrome, severe ischemic lesions in the gastric mucosa, and heavy metal toxicity. Both conditions are benign, and no association with malignant or inflammatory degeneration has been reported.

REFERENCES