

Case 14

Roongruedee Chaiteerakij, MD.

Sombat Treeprasertsuk, MD.

A 45 year-old-male with history of intermittent epigastric pain and diarrhea for 2 years.
He had epigastric pain with melena for 1 day.

EGD was done and showed as figured.



Gross Illustration

Pathological findings

The EGD revealed prolapse of swelling erythematous mucosa of gastric body into pylorus.

Gastric intussusception was diagnosed. He had failed endoscopic reduction and underwent laparotomy which showed invagination of gastric mucosa into the duodenum. Gastric mass 6 cm. in size was found after successful surgical reduction and the pathological results of the total mass excision revealed multilobulated well-defined mass comprising packed of spindle-shaped cells possessed clear cytoplasm with mild pleomorphic nuclei and mitosis is 1 per 50 high power fields. This confirmed to be a gastrointestinal stromal tumor (GIST).

Discussion

Gastroduodenal intussusception is a rare condition occurred in adults caused by prolapse of a mobile gastric tumor into the duodenum¹. A benign or malignant gastric tumor, such as adenoma, lipoma, leiomyoma, hamartoma, gastric carcinoma or carcinoid tumor can be serve as a lead point, however, this condition is a very rare complication of GIST of stomach².

The presenting symptoms are nonspecific and often long standing. The most symptoms are intermittent epigastric pain with nausea and vomiting³. Physical examination is often unremarkable. Computerized tomography can make a preoperative diagnosis. Typical findings include foreshortening and narrowing of the gastric antrum, converging or telescoping of mucosal folds in the antrum or duodenum, and widening of the pyloric canal and duodenum with as associated lead points¹.

Treatment of gastroduodenal intussusception is reduction of the intussusception and surgical excision of the lead point, either endoscopically or through laparotomy⁴.

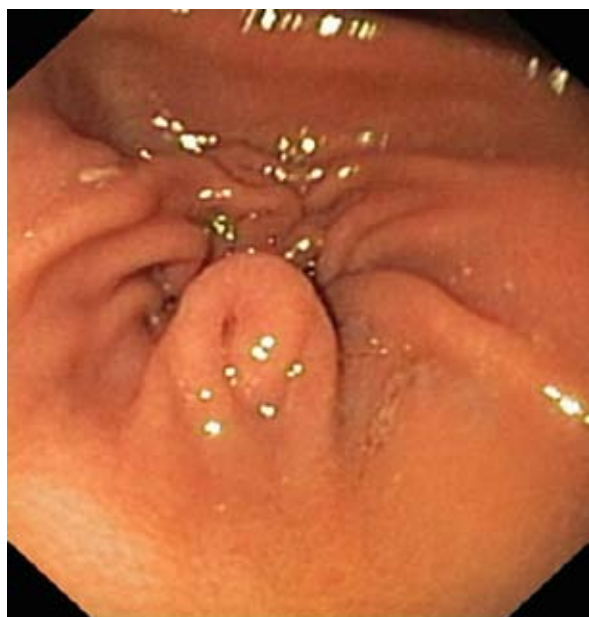
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Case 15

Nathavut Sirimontaporn, MD.

Rungsun Rerknimitr, MD.



A Thai 45 years old male, present with epigastrium discomfort for 6 months.

He was not improved when taking any antacids.

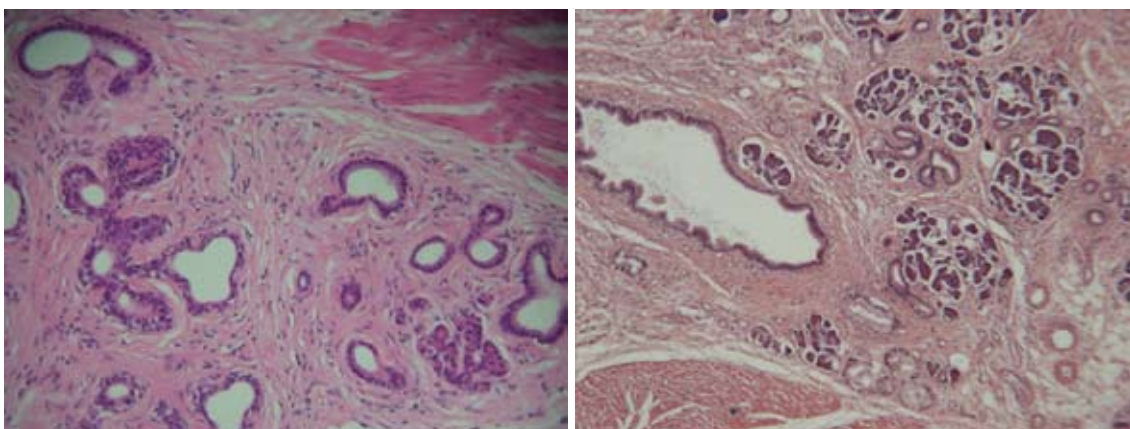
He had no history of upper GI hemorrhage.

Esophagogastroduodenoscopy was shown as pictures.



EGD: Submucosal mass size 1 cm. with central dimpling.

Pathological pictures were shown as figures.



Diagnosis: Ectopic Pancreas (Pancreatic Heterotopia)

Discussion

Pancreatic Heterotopia has no anatomic or vascular connection to the main pancreas and results from altered development of the two primitive pancreatic buds that fuse to form the uncinata-head and body-tail of the normal gland, this results in an ectopic rest being dropped from the dorsal pancreatic rudiment, away from the usual location of the body and tail of the pancreas¹.

It is rare that ectopic pancreas causes symptoms requiring treatment, usually it is found as incidental finding. The most commonly reported sites for ectopic pancreas is stomach, duodenum and jejunum, respectively². Other sites includes biliary tract, liver, spleen and mesentery.

As the pancreatic tissue may present, so the patient may present with abdominal pain, nausea, vomiting or gastrointestinal bleeding depend upon the anatomical location. Acute pancreatitis in ectopic pancreas can cause abdominal pain with elevation of pancreatic enzyme, malignant transformation has been reported.

Radiological diagnosis of ectopic pancreas is difficult but double contrast barium meal may characteristically show a focally raised mucosal area with associated superficial ulceration within gastric antrum³, Endoscopic findings usually show broad based, dimpling, submucosal nodules which can't be differentiated from other submucosal tumors.

Accurate diagnosis can be made with ultrasound and FNA. Appropriate management is conservative if asymptomatic, but for symptomatic patients, surgical management is recommended.

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Case 16

Nathavut Sirimontaporn, MD.

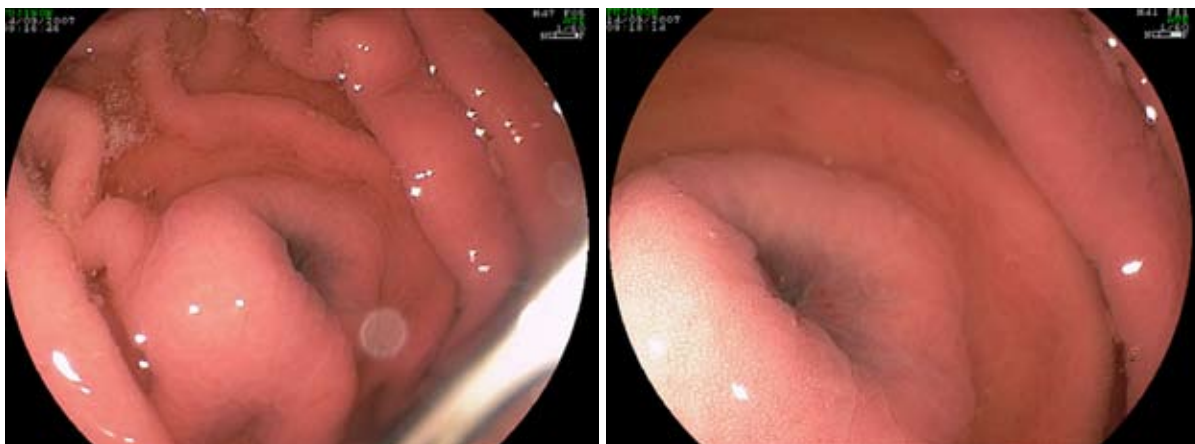
Rungsun Rerknimitr, MD.

A Thai male 36 years old, present with discomfort at epigastrium, loss of appetite and loss of body weight.

CT scan showed multiple liver metastasis with unknown primary.

Esophagogastroduodenoscopy and colonoscopy were done to look for primary lesion.

Esophagogastroduodenoscopy was shown as pictures

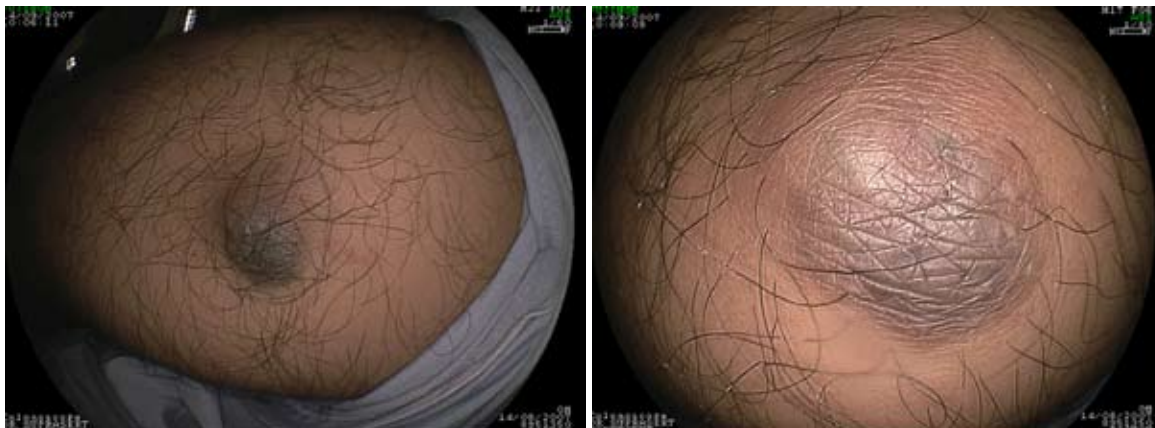


EGD : Submucosal mass with hyperpigmented central umbilication

Colonoscopy was shown as pictures



Colonoscopy findings: Submucosal hyperpigmentation lesion scattered along colonic wall.



Skin lesion as shown

Diagnosis: Malignant melanoma metastasis to stomach and colon

Discussion

Malignant melanoma is one of the most common malignancies associated with metastasis disease of the GI tract. Metastasis to the GI tract can present both at the time of primary diagnosis or several years later as the sign of recurrence. Symptoms are generally identical to those caused other GI symptoms including abdominal pain, dysphagia, fatigue, tenesmus, hematemesis and melena¹.

Most common site of metastases are lymph nodes (73.6%) and lungs (71.3%) followed by the liver (58.3%), brain (54.6%), bone (48.6%). The distribution of GI metastases are liver (58.3%), peritoneum (42.6%), pancreas (37.5%), small bowel (35.6%), spleen (30.6%), colon (28.2%), stomach (22.7%), biliary tract (8.8%)².

Diagnosis of metastasis melanoma is generally made by radiographic contrast studies including CT, ultrasound and barium studies and endoscopic evaluation. Lesion may be ulcerated, umbilicated, or intraluminal mass. Biopsy of masses often secure the diagnosis. Immunohistochemical stains including HMB-45 and S100 often confirm diagnosis.

Prognosis of metastasis melanoma is poor. Five years survival rates reported as low as less than 10%³. Treatment of metastasis melanoma to the GI tract may include surgical resection, chemotherapy, and immunotherapy. Some studies have shown that surgical resection for melanoma metastasis to GI tract may be effective for palliation and may result in long term survival in selected patients.

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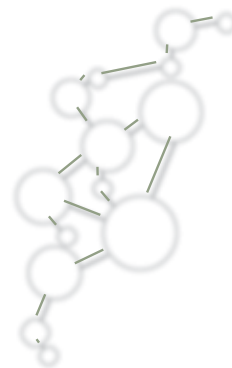
Case 17

Nathavut Sirimontaporn, MD.

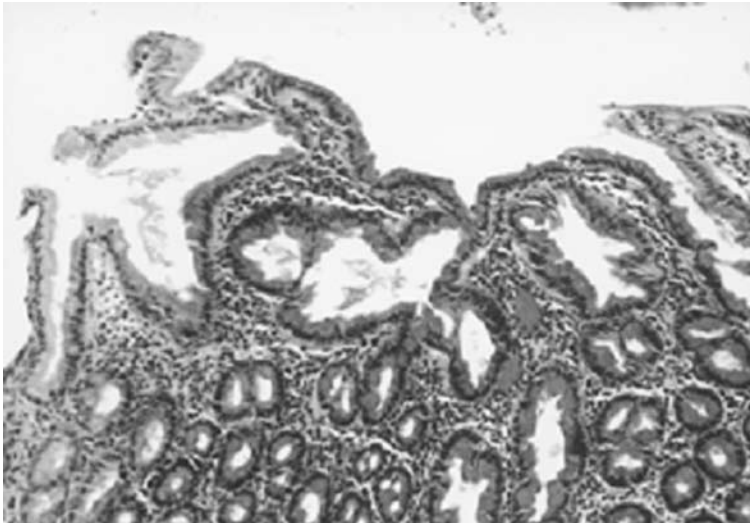
Rungsun Rerknimitr, MD.

A 46 years old female present with chronic epigastrium pain for 2 months

Esophagogastroduodenoscopy was shown as pictures.



EGD findings showed thickening of mucosal folds with diffuse and focal nodularity of 2nd part of duodenum



Pathological report

showed gastric metaplasia of the duodenum.

Discussion

Gastric metaplasia of the duodenum is the metaplastic replacement of groups of duodenal epithelial cells by those with a gastric mucosal phenotype. It is generally believed to occur as a non-specific response to acid/peptic damage and resembles gastric foveolar epithelium in many respects, including in *H. pylori* colonization¹.

H. pylori colonization of regions with gastric metaplasia is thought to play a critically role in the pathogenesis of duodenal ulcer disease and eradication of *H.pylori* results in long term healing of ulcer. Duodenal ulcer recurs if *H.pylori* infection persists or recurs in the gastric mucosa².

Although, it is strongly associated with high acid output and *H.pylori* infection, the clinical significance of gastric metaplasia of the duodenum is obscure³ and they usually disappear after eradication of the *H.pylori* infection⁴.

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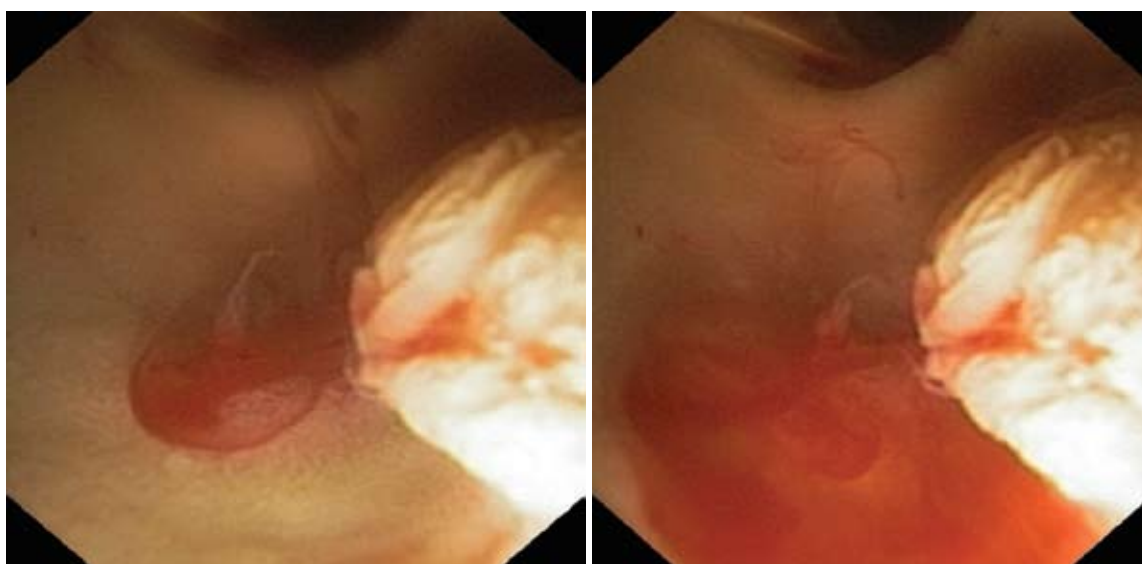
Case 18

Boonlert Imraporn, MD.

Rungsun Rerknimitr, MD.

A 34 year-old man developed recurrent upper GI bleeding with tarry stool 6 times within 6 months. Previous six times of EGD findings were inconclusive. He has no underlying disease and physical examinations were within normal limit.

EGD during active bleeding was done and shown as pictures.



His initial diagnosis was bleeding per ampulla.

Generally differential diagnosis is hemobilia and Hemosuccus pancreaticus. CT scan of upper abdomen with pancreatic protocol was done and findings were normal.

Then ERCP with pigtail plastic stent was done. No blood content was aspirated from bile duct and pancreatic duct. Active bleeding was present on mucosal surface of ampulla of Vater without evidence of ulcer.

In this case, the most likely diagnosis is Dieulafoy's bleeding of ampulla. He was treated with adrenaline injection and argon plasma coagulation without recurrent bleeding.

Discussion

Dieulafoy's lesion is a vascular lesion that is widely recognized as a persistently engorged, tortuous artery in the muscularis mucosa which is not associated with inflammation or atherosclerosis. The incidence of this lesion in patients with upper gastrointestinal bleeding has been estimated to be between 0.3% and 6.7%. Clinically, these lesions manifest as massive gastrointestinal hemorrhage, with no preceding symptoms. Approximately 75% to 95% of Dieulafoy's lesions are found within 6 cm of the gastroesophageal junction, predominantly on the lesser curve¹. Lesions of similar morphological and histological features have been found in the distal oesophagus², the duodenal bulb³, the jejunum⁴ the colon and the rectum⁵. However, there has never been reported about this lesion at ampulla. In conclusion, this case is an uncommon manifestation and location of Dieulafoy's bleeding which usually needs repeated EGD and endoscopic therapy.

References

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Case 19

Nopavut Geratikornsupuk, MD.

Rungsun Rerknimitr, MD.

A 32 year-old-male with a history of fighting with each other and broke his teeth. EGD was done.

Finding was showed as figured. (A,B)



Picture A

Picture B

Picture A : Denture as a foreign body in the stomach.

Picture B : Denture removal by a grasping snare

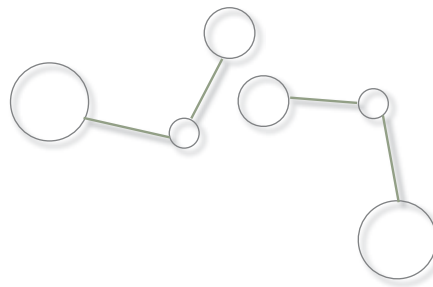
Discussion

Endoscopic removal of ingested foreign bodies should be attempted if the object is not spontaneously passed through the pylorus. This can be safely accomplished with the wire snare technique, or with special grasping forceps that are currently available¹.

Long-items such as forks and spoons are unable to pass through the duodenum. These foreign bodies present a unique challenge for the endoscopist as they tend to T-bone at the gastro-esophageal junction, making it technically very difficult to remove. Several techniques have previously been described to remove these objects, including the use of two separate gastroscopes; using a single-lumen gastroscope with two snares and double-snare technique with a two-channel gastroscope²⁻⁴.

References

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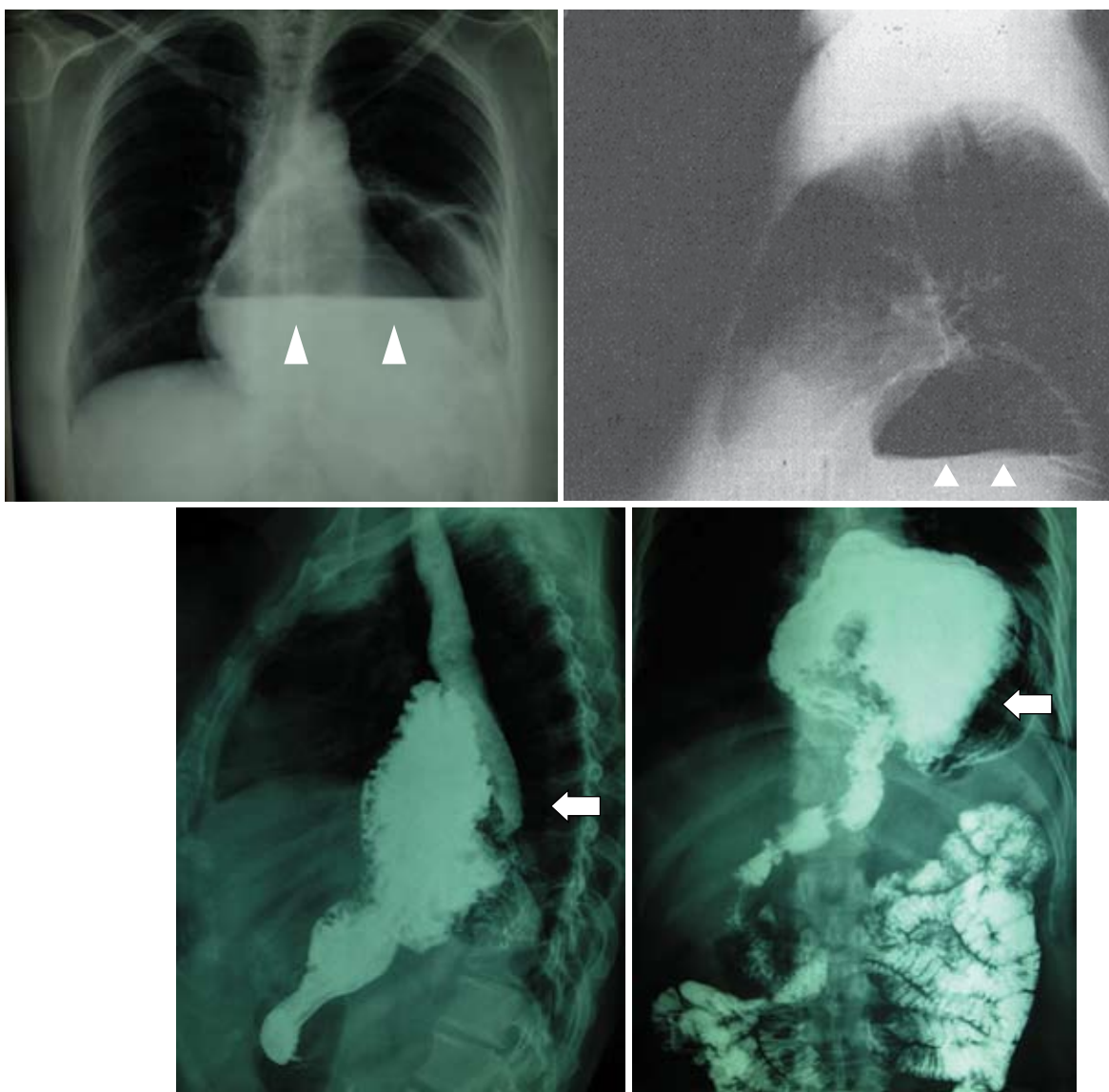
Case 20

Sombat Treeprasertsuk, MD.

Varocha Mahachai, MD.

A 55-year-old obese female came with sudden epigastric discomfort after meal and syncope 1 hour prior to hospital. She had dyspeptic symptoms off and on for 2-3 months and got EGD from other hospital and the result showed normal endoscopic finding. She had no weight loss or biliary pain. She had regular bowel motions.

Acute abdomen and chest x-ray were done as shown. Then upper GI study was done.



Acute abdomen and chest x-ray showed retrocardiac air-fluid level; stomach like dislocated into the thoracic cavity. The diagnosis of paraesophageal herniation was made.

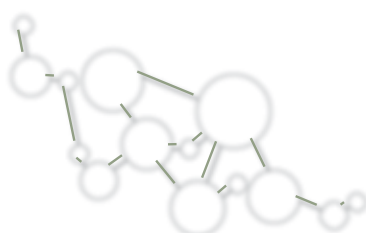
Discussion

Paraesophageal hernia is a severe form of hiatal hernia, characterized by the upward dislocation of the gastric fundus into the thoracic cavity. This entity is usually found in the elderly patients, and obesity. But in some report showed that some other related disorders such as hypertension, peritoneal adhesions and gall bladder/bile duct diseases were also highly associated with paraesophageal hernia¹. Barium swallow is still recommended as an essential and basic diagnostic tool for diagnosis. However, gastroscopy is more helpful to identify the correct classification of hiatal hernia².

Laparoscopic paraesophageal hernia repair is the safe and recommended even in elderly patients. Most patients have a good symptomatic outcome irrespective of their age^{3,4}. Awareness of these anomalies and know about this clinical setting are essential to diagnose and prevent further complications.

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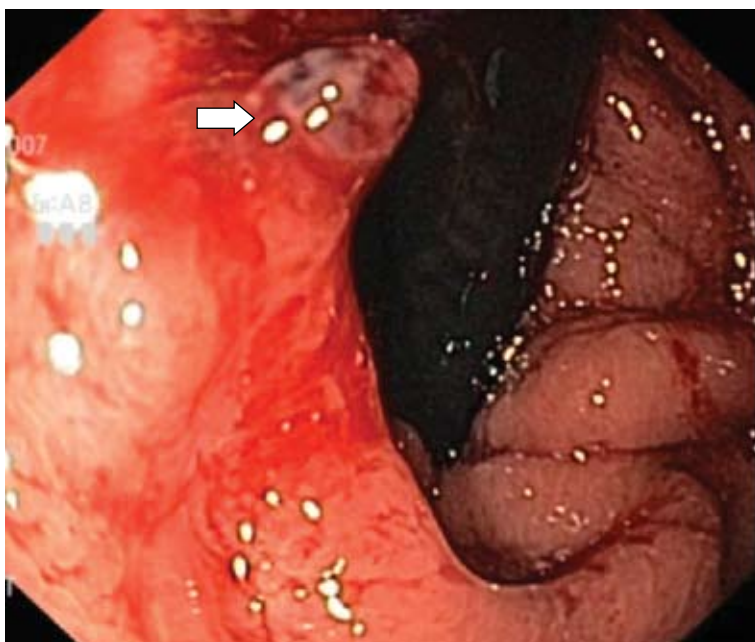
Case 21

Danai Limmathurotsakul, MD.

Varocha Mahachai, MD.

A 54 years old male with chronic alcoholic drinking came to the hospital with bloody vomiting 1 day prior to the hospital.

EGD was done and showed as figure.



The EGD showed one end-on vessel with blood oozing without ulcer at cardia of stomach. The differential diagnosis are visible vessel with ulcer from any cause such as NSAIDs user or *H. pylori* infection. The patient was treated by adrenaline injection around the vessel and bipolar coaptation was performed.

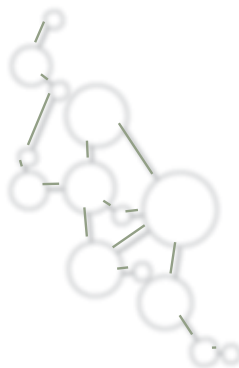
Discussion

Dieulafoy disease is an unusual cause of gastrointestinal hemorrhage that can be fatal. It arises from an abnormally large eroded submucosal artery commonly located in the proximal stomach¹. Dieulafoy lesions can be difficult to recognize during an acute episode of upper gastrointestinal bleeding, and pose an important challenge to treat endoscopically. A high index of suspicion must be entertained to diagnose this type of lesion². The incidence of this lesion in patients with upper gastrointestinal bleeding has been estimated to be between 0.3% and 6.7%.

There are data showed that mechanical treatment (hemoclip and band ligation) achieved higher primary hemostasis and lower rebleeding rate compared with injection therapy. Mechanical endoscopic therapies should be the first option in the management of Dieulafoy's lesion³.

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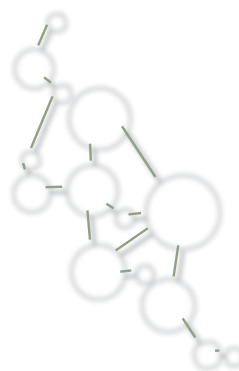
Case 22

Wiriaporn Rittitid, MD.

Rungsun Rerknimitr, MD.

A 51-year-old Thai man presented with bright red blood hematemesis for 3 hours. Physical examination revealed positive abdominal shifting dullness and splenomegaly.

Esophagogastroduodenoscopy was done and shown as figure.



Esophagogastroduodenoscopy showed large tortuous vessels at fundus (arrow) without nipple sign. The diagnosis is fundic type gastric varix (IGV 1).

Discussion

Isolated GV (IGV) occurring in the absence of esophageal varices (EV) have been recognized for some time¹ and are subclassified into 2 groups: (1) IGV 1: varices located in the fundus that usually are tortuous and complex in shape; and (2) IGV 2: ectopic varices in the antrum, corpus, and around the pylorus. Similar to EV, GV occur in patients with generalized portal hypertension (PHT) of diverse origins. IGV can also occur in individuals with localized PHT, arising from pathology of the splenic vein, such as thrombosis or stenosis².

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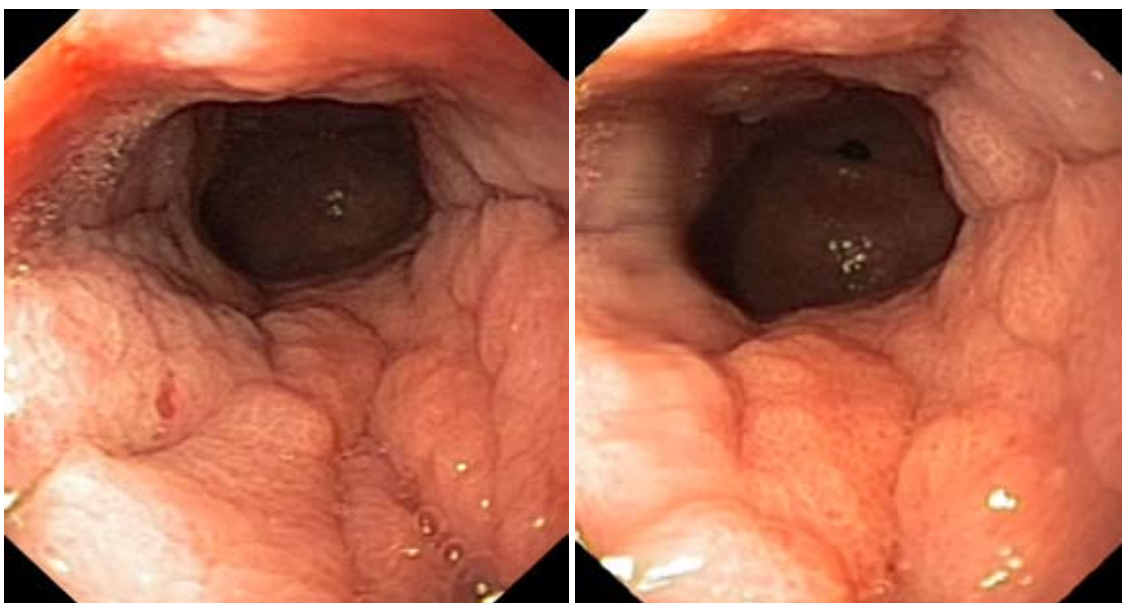
Case 23

Wiriyaporn Ridditid, MD.

Varocha Mahachai, MD.

A 48-year-old Thai woman presented with early satiety and weight loss for 2 months. Physical examination revealed cachexia without abdominal mass.

Esophagogastroduodenoscopy was done and showed as pictures.



EGD showed marked thickening of the gastric mucosal folds, which were difficult to distend with subsequent luminal narrowing and gastric wall rigidity. Some gastric folds were enlarged and some parts of the mucosa had a mosaic pattern aspect.

The differential diagnosis of large gastric folds includes malignancies (adenocarcinoma, lymphoma), benign conditions (Menetrier's gastritis, lymphoid hyperplasia and amyloidosis). Biopsy was performed and showed poorly differentiated adenocarcinoma.

Discussion

Linitis plastica is a rare form of primary or secondary undifferentiated adenocarcinoma. This condition is marked by thickening and fibrosis of the gastric wall, the malignant cells being scarcely distributed in the fibrous stroma. An endoscopic aspect of large gastric folds that fail to distend on insufflation covered by a nodular mucosa with carmine red lesions or a leopard skin appearance might be

suggestive for gastric linitis. The most common site of gastric linitis is the antral and pyloric regions (with variable spread proximally towards the gastric body). The fundus is least often involved. Multiple endoscopic biopsies are required, however, standard endoscopic biopsy specimens which usually contain only mucosa offer frequently negative results for malignancy. In order to increase the diagnostic yield, the use of a diathermic snare which permits the obtaining of larger and deeper histologic samples is advised.

References

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