Laparoscopic undo of Vertical Banded Gastroplasty due to Barret's Esophagus

AHMED ABDELSALAM; MD, MRCS

Associate Professor of General and Laparoscopic Surgery, Cairo University

IFSO NAPOLI 2023

Disclosure

- Nothing to disclose

Clinical presentation

- A 48-year-old lady with history of laparoscopic VGB in 2010.
- Repeated attacks of severe reflux symptoms and vomiting.
- BMI at presentation was 17.8 kg/m^2, with 50 kg weight- her initial weight was 84 kg-.

Pre-operative workup

- Hb on presentation 5.6 g/dl underwent blood transfusion.
-
- Hypokalemia (K: 3.1 mmol/L), corrected.

- Albumin was 3.1 g/dl.

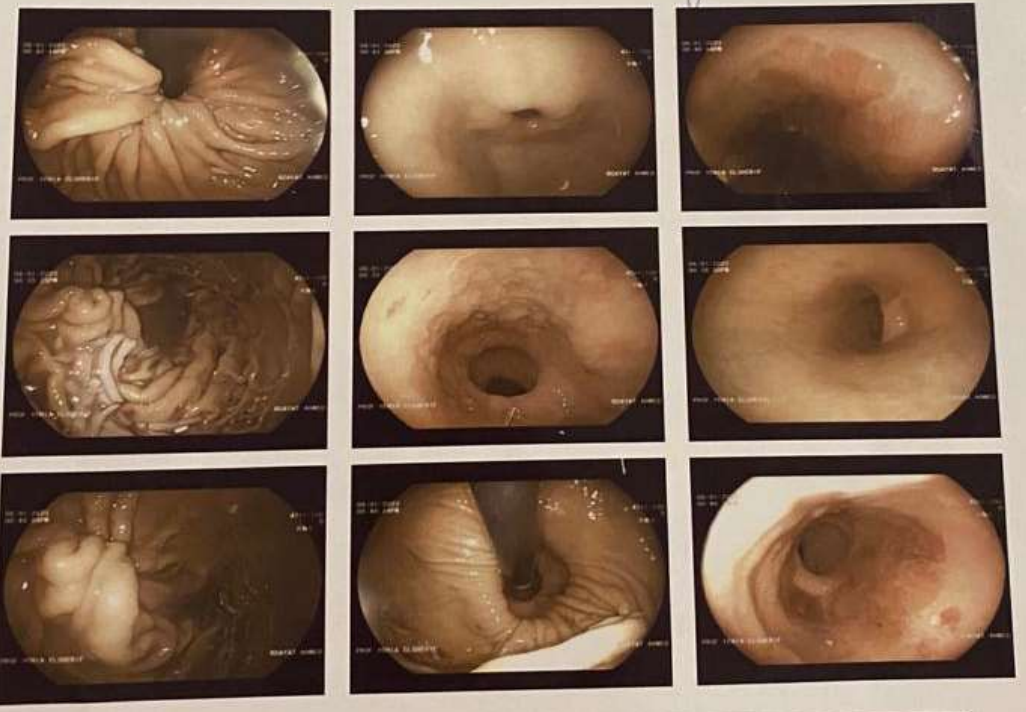
Pre-operative workup

- Upper GI:
  - A small sliding hiatal hernia; 4 cm, irregular nodular friable mucosa easily bleed on touch.
  - Gastric sac divided into 2 compartments with tight stricture noted at 42 cm from dental arch.
  - Severe reflux esophagitis and Barret's with no dysplasia was diagnosed after histopathological examination of the biopsy.

Description :

Esophagus:The Z-line is noticed at 26 cm from the dental arch, with a large hiatus hernia, more than 10 cm long, with irregular nodular, friable mucosa that bleeds easily on touch , multiple biopsies were taken (Biopsy 2).
Stomach:
Post operative stomach ?? Bariatric surgery.
The residual gastric sac is seen divided into two compartments with a tight stricture noticed at about 42 cm from the dental arch, at the site of the stricture, the mucosa is seen friable and necrotic, biopsied (Biopsy 1).
Antral mucosa is seen pale.
Pyloric ring is rounded and active.
Duodenum: Normal mucosa down to the second part.

Prof Dr . Yahya Elsherif



CLINICAL DATA: A case of gastric tight stricture and friable esophageal mucosa bleeds on touch.
SPECIMEN: 1) Gastric biopsy at tight stricture endoscopic biopsy. 2) Z line endoscopic biopsy.

GROSS PICTURE: Two specimens were received, labeled: (1) Gastric biopsy at tight stricture & (2) Z line; each was formed of multiple small soft greyish white tissue biopsy. Both were totally embedded.

MICROSCOPIC PICTURE: Serial sections examined from *specimen (1)* revealed pieces of gastric mucosa showing edematous lamina propria, mild lymphoplasma cells infiltration with few neutrophils and within normal glandular structure. Few H. pylori could be detected. Serial sections examined from *specimen (2)* revealed polypoid pieces of gastric mucosa (cardia type) showing foveolar hyperplasia, hyperplastic glands, edematous lamina propria, moderate lymphoplasma cells infiltration with many neutrophils; attacking the glands at many foci. Villiform mucosal tissue fragments with occasional minimal goblet cells and no evident dysplasia. The lamina propria was chronically active inflamed. fragment of ulcer site with marked inflammation was also included. *No evidence of atrophy, dysplasia or malignancy in both specimens*.

DIAGNOSIS: 1) Gastric Endoscopic Biopsy.

- **Chronic Gastritis, Mild Intensity Associated With H. Pylori.**
- **No Malignancy.**

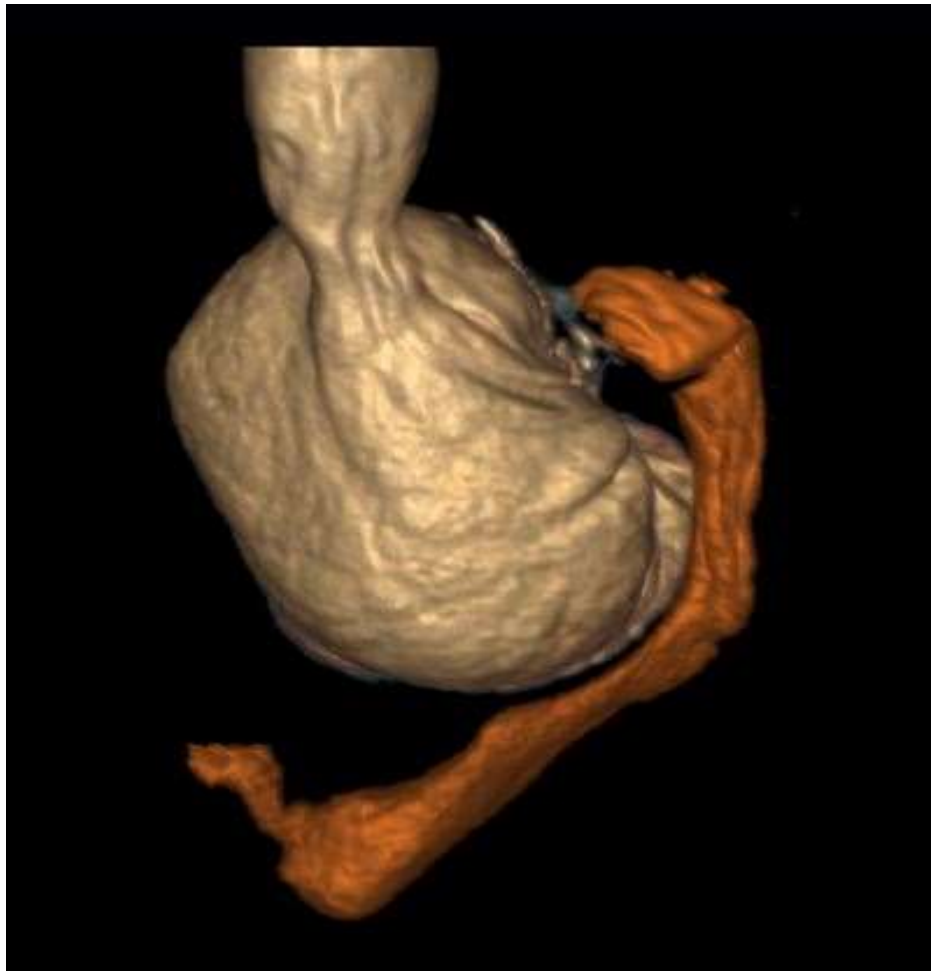
2) Z-Line Endoscopic Biopsy:

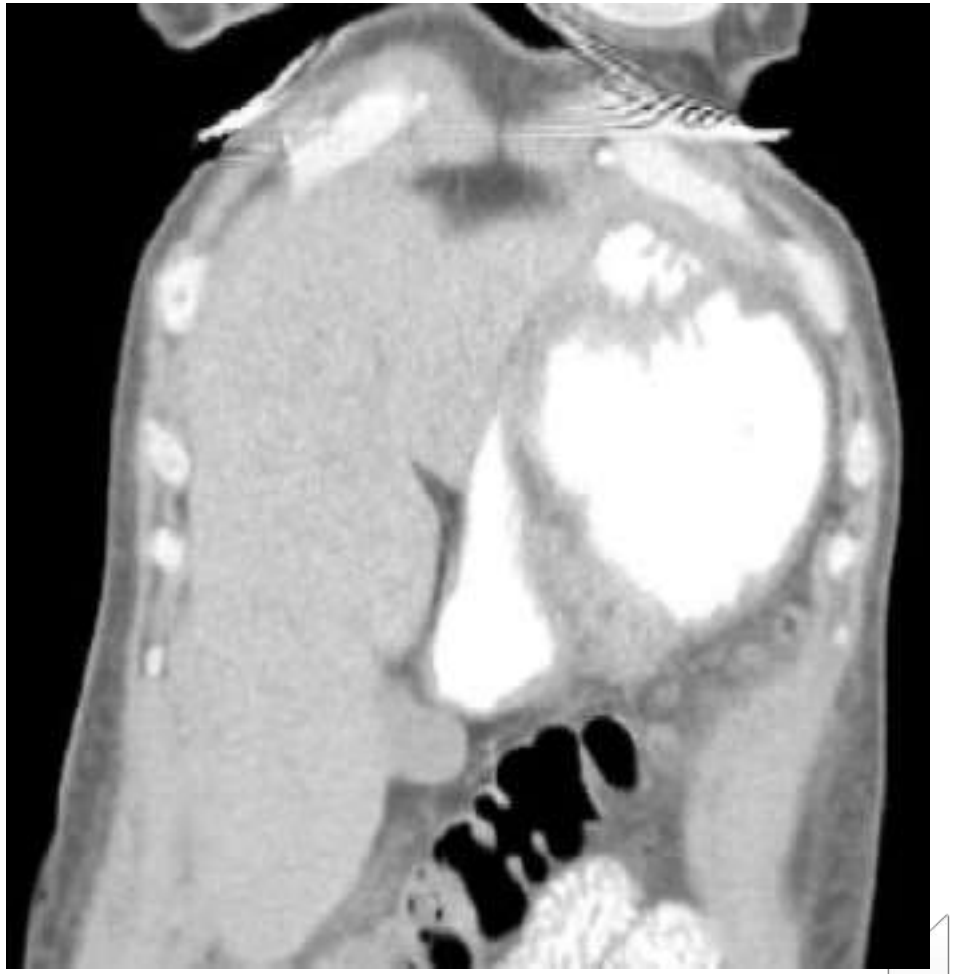
- **Polypoid Moderate Chronic Active Gastritis Associated with Barrett's Esophagitis Free of Dysplasia For Follow Up.**
- **No Malignancy.**

IFSO NAPOLI 2023

Pre-operative workup

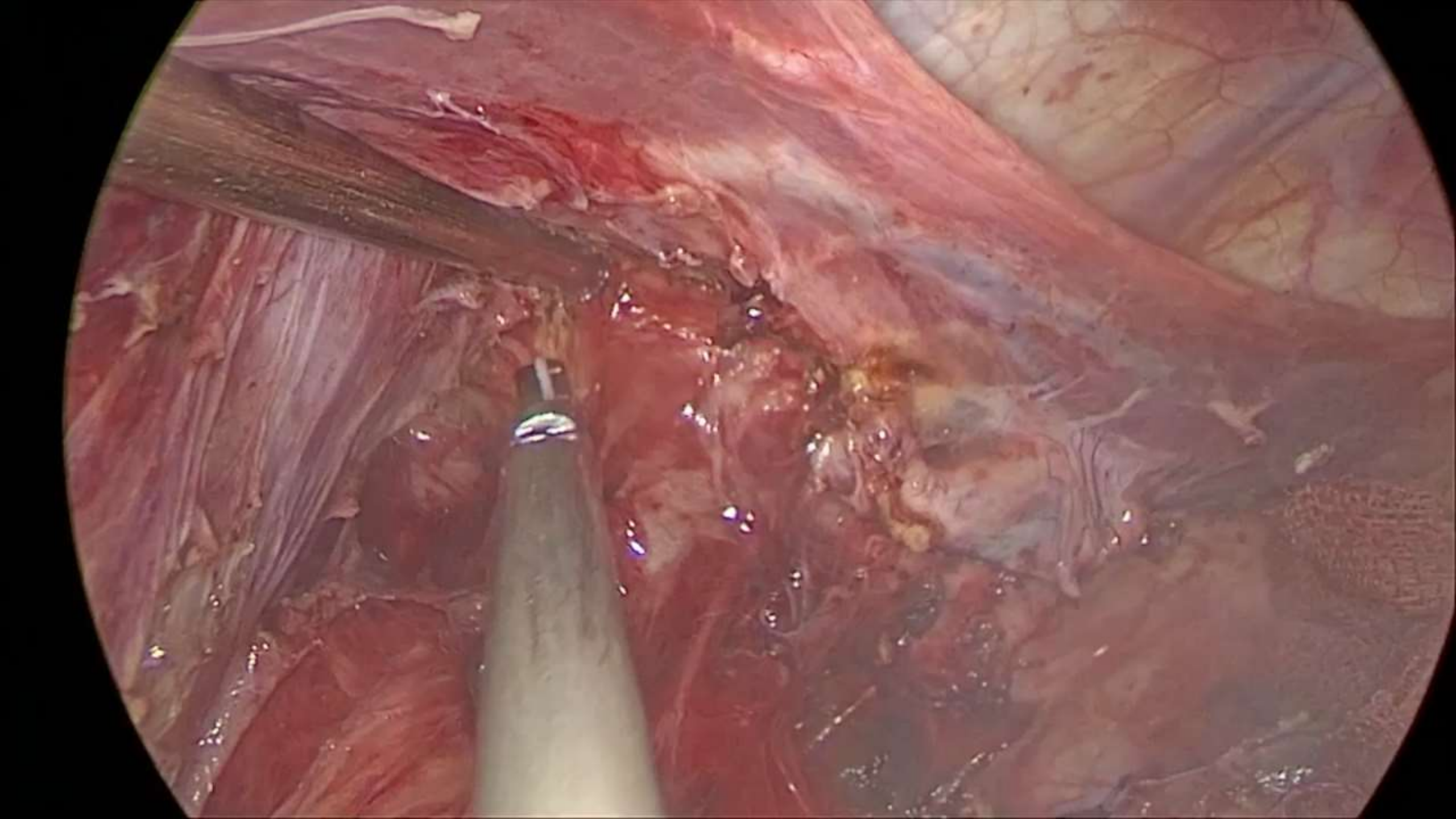
- MSCT volumetry:
  - Gastric pouch 950-1000cc !!
  - Remaining part of the stomach partially distended ~ 250cc





Operative procedure

- Laparoscopic adhesiolysis was done.
- Dissection of the small hiatus hernia.
- Identification of the oesophagus, dilated gastric pouch anteriorly connected to the remaining part of the stomach posteriorly through a narrow stoma located 1 cm from the GEJ with tough mesh around the stoma.
- Gastro-gastrostomy was done.



Postoperative outcome

- The patient was discharged POD2.
- Follow up at 2 weeks and 2 months--- significant improvement of the reflux symptoms, no attacks of vomiting.
-
- EGD was repeated 3 months after the procedure, there where improvement of the condition.
- Barret’s esophagous was without dysplasia and for follow-up

Conclusion

- VBG is an abandoned procedure, but its consequences are still faced.
- Presence of a mesh creates severe adhesions and may jeopardize stapling
- Undoing is an option specially in patients with low BMI.

THANK YOU

IFSO
NAPOLI
2023