

## Video Case Report

# Heterotopic Pancreas Resection with Concomitant Sleeve Gastrectomy: Video Case Report

Talat Albeiti, MD, FACS<sup>\*</sup>; Samah Melebari, MD;  
Alwahhaj Khogeer, MD; Aly Elbahrawy, MD, PhD, FACS  
Specialized Surgical Center, King Abdullah Medical City,  
Makkah, Saudi Arabi

**\*Corresponding author: Talat Albeiti**

Specialized Surgical Center, King Abdullah Medical City,  
Makkah, Saudi Arabi.  
Email: talbeiti77@gmail.com

**Received:** June 19, 2023

**Accepted:** July 21, 2023

**Published:** July 28, 2023

**Abstract**

**Background:** Over the past three decades there has been significant rise in bariatric procedures and hence more rare conditions to be encountered.

**Methods:** Here we report a case of sleeve gastrectomy in a 19-year-old male, suffers from morbid obesity with concomitant resection of a relatively large heterotopic pancreas presented incidentally as a submucosal gastric lesion during preoperative work-up, which biopsy was inconclusive, and the commonest differential was gastrointestinal stromal tumor.

**Results:** After counselling, sleeve gastrectomy, with mass free-margin resection was performed laparoscopically. Histopathology revealed 2.5×2.2 cm ectopic pancreatic tissue.

**Conclusion:** To the best of our knowledge there are very few cases of heterotopic pancreas reported in relation to bariatric surgery. This video report demonstrates the safe excision of this rare lesion with concomitant sleeve gastrectomy without adding any morbidity.

**Keywords:** Heterotopic pancreas; Ectopic pancreas; Submucosal lesions; Morbid obesity; Sleeve gastrectomy

**Introduction**

Heterotopic pancreas is a rare condition where pancreatic tissue is found in extra-glandular locations with no anatomical or vascular relation to pancreas. It is found in autopsy specimens in 0.5–15% [1]. It can be found anywhere in the abdominal cavity, most commonly in the gastrointestinal tract from the distal end of the esophagus to the colon, however, mostly occurs in stomach (25%) [2,3], duodenum (30%) and jejunum (15%), but it could also be very rarely found in extra-abdominal location [4-9]. In most cases, the patients are asymptomatic, and the condition is incidentally discovered [10].

**Methods**

Here we report a 19-year-old male, not known to have any medical illness, suffers from morbid obesity with a BMI 49.8kg/m<sup>2</sup>, presented to bariatric surgery clinic. On routine pre-operative assessment, Esophago-Gastro-Duodenoscope (EGD) revealed an incidental, relatively large, 3 cm submucosal mass in gastric body. Biopsy was inconclusive. Computed tomography of abdomen revealed 3 cm solitary submucosal mass at distal gastric body near greater curve; the commonest differentials were gastrointestinal stromal tumor, gastrointestinal autonomic nerve tumor, carcinoid, lymphoma, or ectopic tissue.

**Results**

After counselling, sleeve gastrectomy, with mass free-margin resection was performed laparoscopically using sports, under the guidance of a 36-french calibration tube, intra-operative EGD confirmed the complete excision. Patient discharged on the next day. On 2 weeks post-operative, patient was seen in good condition and 15kgs loss. No perioperative complications were sustained. Histopathology revealed 2.5X2.2 cm ectopic pancreatic tissue with 1 cm free margin.

**Conclusion**

With the increasing number of bariatric procedures done worldwide, we encounter more and more rare conditions. To the best of our knowledge there are very few cases of ectopic pancreas reported in relation to bariatric surgery and none was that big [11,12].

In our video report we demonstrated that concomitant bariatric surgery with excision of the heterotrophic pancreatic tissue was safe and did not add any morbidity. Patient was discharged home on the next day with smooth post-operative course.

### Author Statements

#### Approvals

IRB approval was obtained.

Consent from the patient was obtained.

#### Financial Support and Sponsorship:

Dr. Talat Albeiti has no financial ties to disclosure

Dr. Samah Melebari has no financial ties to disclosure

Dr. Alwahhaj Khogeer has no financial ties to disclosure

Dr. Aly Elbahrawy has no financial ties to disclosure

#### Conflicts of Interest

Dr. Talat Albeiti has no conflicts of interest

Dr. Samah Melebari has no conflicts of interest

Dr. Alwahhaj Khogeer has no conflicts of interest

Dr. Aly Elbahrawy has no conflicts of interest

#### References

1. Guillou L, Nordback P, Gerber C, Schneider RP. Ductal adenocarcinoma arising in a heterotopic pancreas situated in a hiatal hernia. *Arch Pathol Lab Med.* 1994; 118: 568-71.
2. Christodoulidis G, Zacharoulis D, Barbanis S, Katsogridakis E, Hatzitheofilou K. Heterotopic pancreas in the stomach: a case report and literature review. *World J Gastroenterol.* 2007; 13: 6098-100.
3. Papaziogas B, Koutelidakis I, Tsiaousis P, Panagiotopoulou K, Paraskevas G, Argiriadou H, et al. Carcinoma developing in ectopic pancreatic tissue in the stomach: a case report. *Cases J.* 2008; 1: 249.
4. Caberwal D, Kogan SJ, Levitt SB. Ectopic pancreas presenting as an umbilical mass. *J Pediatr Surg.* 1977; 12: 593-9.
5. Heller RS, Tsugu H, Nabeshima K, Madsen OD. Intracranial ectopic pancreatic tissue. *Islets.* 2010; 2: 65-71.
6. Jaschke W, Aleksić M, Aleksic D. Heterotopic pancreatic tissue in a bronchogenic cyst-diagnosis and therapy. *Thorac Cardiovasc Surg.* 1982; 30: 58-60.
7. Szabados S, Lénárd L, Tornóczy T, Várady E, Verzár Z. Ectopic pancreas tissue appearing in a mediastinal cyst. *J Cardiothorac Surg.* 2012; 7: 22.
8. Wang CK, Kuo Y, Yeung K, Wu C, Liu G. CT appearance of ectopic pancreas: a case report. *Abdom Imaging.* 1998; 23: 332-3.
9. O'Reilly DJ, Craig RM, Lorenzo G, Yokoo H. Heterotopic pancreas mimicking carcinoma of the head of the pancreas: a rare cause of obstructive jaundice. *J Clin Gastroenterol.* 1983; 5: 165-8.
10. Armstrong CP, King PM, Dixon JM, Macleod IB. The clinical significance of heterotopic pancreas in the gastrointestinal tract. *Br J Surg.* 1981; 68: 384-7.
11. Gadelha Bezerra Silva B, Veras Oliveira A, Almeida de Sousa Jucá M, de Sousa Nóbrega AG, Lopes PM, et al. Management of gastric ectopic pancreas identified in preoperative evaluation of bariatric surgery – A case report. *Int J Surg Case Rep.* 2020; 77: 353-6.
12. Haidar Ahmad H, Saliba C, Nicolas G, Ghandour MA, Zeaiter NM, et al. Unexpected gastric ectopic pancreas during sleeve gastrectomy: A case report. *Am J Case Rep.* 2019; 20: 1966-8.