

# Body packing with pyloric stenosis successfully treated with open pack retrieval and gastric bypass

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### Introduction

Foreign body ingestion unintentionally or intentionally in adults are not uncommon on the contrary to children. Intentional ingestion of illicit drugs or tobacco/drug pack is one common reason other than psychosis. Infrequently, body packing may end up with bowel obstruction with 'drug pack' impacted at various constriction point of gastrointestinal tract [1]. Here, we report a case of intentional foreign body ingestion by a jail inmate whom unfortunately also has pyloric stenosis. The clinic presentations and treatment strategy are discussed.

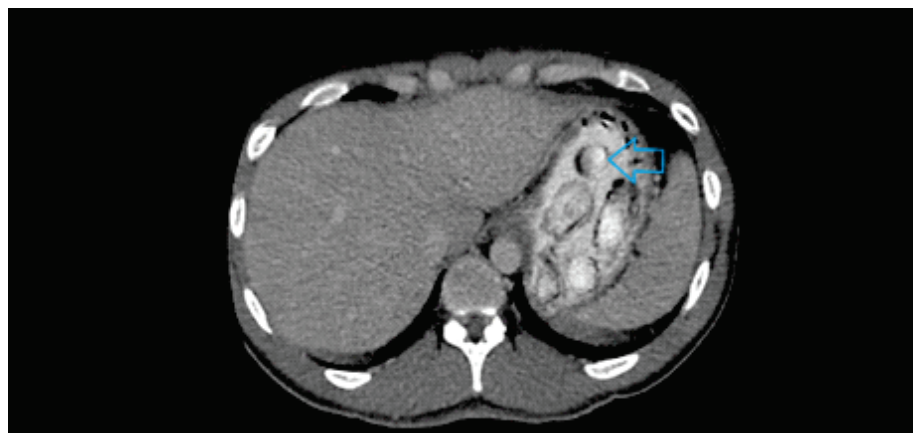
### Case Presentation

A 24-year-old gentleman presented with abdominal pain for 5 days associated with abdominal distention, vomiting and reduce oral intake. He also revealed that he had history of ingesting tobacco packs a month ago which he did not observe it passing out on his motion. Clinical examination revealed that the abdomen is scaphoid, there was mild tenderness over the epigastric area. White cell counts, haemoglobin, platelet count and renal profile were within normal limit. Contrast enhanced computed tomography (CT) scan of the abdomen revealed that there were at least 9 well defined oval shaped

material seen within the stomach until the pylorus (Figure 1). Esophagogastroduodenoscopy (EGD) assessment revealed multiple tobacco packs (Figure 2). Endoscopic retrieval was successful to remove only a single pack but was abandoned as there were too many packs, which logically thought to be time consuming and carries additional risk of aspiration. An emergency laparotomy was performed to remove all the tobacco packs safely. Intraoperatively, there were 9 additional tobacco packs removed (Figure 3). We observed associated pyloric stenosis which explained the reason of impaction at stomach. We performed an antecolic gastrojejunostomy bypass with anterior gastrostomy opening. Post operative recovery was uneventful and he could tolerate normal diet.

### Discussion

Treatment strategy for current case is guided by accurate localization, size and configuration of foreign body ingested with computed tomography imaging and endoscopic assessment, concordant with previous literature [2]. Both of these modalities were commonly embarked for precise pre-interventional assessment. However, ESGE only recommend CT scan in patients with suspected perforation or complications that may require surgery. Abdominal radiography was recommended if ingestion of a radiopaque



**Figure 1.** Contrast CT in axial plane shows numerous foreign bodies in stomach (arrow head)

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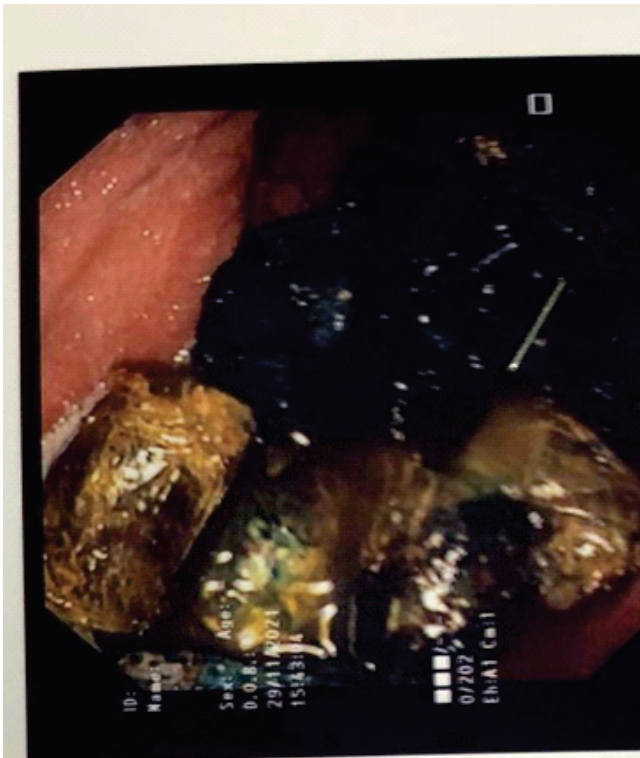
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**Figure 2.** Esophagogastroduodenoscopy (EGD) assessment revealed multiple tobacco packs

object and no imaging if non bony food bolus with no complication. With regards to endoscopy measures, it is often accompanied with therapeutic intention. European and American guideline recommend against routine use of endoscopy in asymptomatic small and blunt foreign body, as clinical observation may suffice [3]. However, early use is recommended for the symptomatic ones or hazardous foreign body such as batteries/magnet/sharps objects. Timing of intervention varies depending on degree of obstruction, configuration and type of the object. Sharps and batteries or complete oesophageal obstruction requires emergency endoscopy less than 6 hours [3]. As for body packing, ESGE also recommend against endoscopy retrieval [3]. The guideline encourages surgical referral with suspected packet rupture, failure of packets to progress or intestinal obstruction. In aforementioned case, the man had single packet removed with endoscopic attempt. That was a curious attempt. Judging by the numbers and size of the packs, continued efforts for endoscopy retrieval was deemed with potential risk of aspiration, oesophageal injuries and there is a possibility of the packet to rupture which may pose unpredictable toxic effect with questionable lethality. We opted for a safer and quicker approach of open gastrostomy removal. In the current case, there are multiple packets with symptoms of gastric outlet obstruction, wait and watch approach for was not feasible. Nonetheless, this approach is



**Figure 3. :** Intraoperative retrieval of tobacco packs

preferred and recommended in ESGE guideline. Current case we did not embark on distal gastrectomy as we anticipate difficulty at duodenal dissection with scarring over pylorus. As the man presented in an emergency manner, the physiological and nutritional state was deemed safer with a gastric bypass alone to solve the issue of pyloric stenosis.

### Conclusion

Body packing impacted at pylorus is uncommon. This pattern of impaction shall raise the suspicion of associated pyloric stenosis due to recalcitrant ulcer. Accurate localization, size, and configuration allows precise decision making for best treatment option. Endoscopy carries risk of aspiration and injuries to the oesophageal passage. Open surgery may serve as better option for safety and efficacy reasons, especially when one has a good anaesthetic risk.

### References

- 1 Lim RZ, Ang AA, Tan JH, Lee EP, Chiew JL, Tan HC. The Enigma in Management of Complicated Foreign Body Ingestion Impacted Distal to Oesophagus: A Case Series and Literature Review.
- 2 Chhabra MK, Mongia AK, Sarangi PS, Kumar R, Bhalerao A. Small bowel obstruction due to foreign body ingestion in jail inmates: a case series. *International Surgery Journal*. 2016 Dec 13;2(2):316-9.

3 Birk M, Bauerfeind P, Deprez PH, Häfner M, Hartmann D, Hassan C, Hucl T, Lesur G, Aabakken L, Meining A. Removal of foreign bodies in the upper gastrointestinal tract in adults: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. Endoscopy. 2016 May;48(05):489-96

**Learning Points:**

- A Foreign Body ingestion in adults is becoming common in today's modern world.
- In a case of body packing, use of endoscopy retrieval of the foreign body is not advised as there is a risk of rupturing the content which can be detrimental to health.
- In regards to endoscopy, clinical observation is sufficient for small and blunt foreign body which is usually asymptomatic.