# **Endoscopic Management of Narcotic Substances: a Heroin Story**

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#### **Case Presentation**

- A 27 year old male with no significant medical history who presented under police custody with abdominal pain after swallowing narcotic packets.
- Patient admitted to swallowing three packets of banded heroin bags (each packet had 10 bags in it) in an attempt to hide them from police eight hours prior to presentation.
- Patient vomited one packet on presentation.
- Initial CT scan with retained material in gastric antrum [Figure 1].
- GI was consulted ad recommended GoLytely preparation and frequent monitoring for passage of narcotic bags.
- 72 hours after presentation, patient had not yet passed heroin bags despite aggressive bowel regimen. He was monitored on telemetry with intravenous Narcan at bedside should he start to have respiratory or neuro compromise.
- Repeat CT scan was obtained which showed dense, dependent material in gastric antrum (unchanged from prior) [Figure 1].
- Endoscopic retrieval planned under supervised setting.
  - In the Operating Room with patient intubated
  - Bedside Narcan drip available
  - Surgical team and attending at bedside

### Procedure:

Endoscope was passed without difficulty through esophagus and into stomach where packets of heroin were found adherent to pre-pyloric mucosa. Underlying erythema was visible. Package was carefully dislodged from stomach via gentle nudge of endoscopy as well as gentle water pressure. Packages were secured in Roth net and slowly retrieved [Figure 2]. Two packets of 10 heroin bags were retrieved successfully. Careful visualization demonstrated no tears or breaks of packets.

# Figures:





**Figure 1**: CT scan with Heroin packets on presentation (A) and after 72 hours (B).

Age:
Description of connected E402
Description of the connected E402
Description of the connected E402



Figure 2: Endoscopic retrieval of heroin packets.

## Discussion

## **Current ASGE Guidelines (2011):**

Endoscopic extraction of the packets- not favored given potential hazards including manipulation and rupture of the packets and deterioration of the patients' condition. Internal concealment of illegal drugs wrapped in plastic or contained in balloons or latex condoms, referred to as "body packing," is seen in regions of high drug trafficking and has been reported in both children and adults. The packets can usually be seen radiographically, and CT scanning may be helpful, although false-negative scan results have been reported. Rupture and leakage of the contents can be fatal, so endoscopic removal should not be attempted. Surgical intervention is indicated when packets fail to progress or if signs of intestinal obstruction are present. If packet rupture is suspected, surgery and urgent medical consultations for drug toxicity are indicated.

# Discussion (continued)

Guidelines from ASGE from 2011

Since then, several studies have emerged in terms of management of ingested narcotics including several case reports and series.

- Cowan et al. (2015): case report on endoscopic retrieval of a methamphetamine bag from a patient's esophageal tract
- Shabani et al. (2016) a case series of four case reports about retrieval of opioid packet in body stuffers.
- Hoffman et al. (2016) believe that endoscopy may be safe when performed in a highly controlled setting, especially when a packet can be tested for strength against the snare and patients are asymptomatic.
- Shabani et al. [Tehran, Iran]. Compare complications, hospital stay, and final outcomes in body stuffers assigned to endoscopy versus conservative/ surgical treatment. Endoscopy patients had a shorter hospital stay (median 1.5 vs. 2 days, P = 0.018). Endoscopic retrieval was associated with fewer complications and shorter hospitalization.

#### Conclusion

Endoscopy can be safely attempted to retrieve narcotics under supervised settings. Further studies would be needed for evaluation of endoscopic management as a first line means for narcotic retrieval in supervised and controlled settings.

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