Published online 2016 November 7.

Case Report

International Smuggling of Cocaine by Body Concealment: A Case Report

Onur Kaplan,¹ Ozgur Sogut,^{1,*} and Mehmet Yigit¹

¹University of Health Sciences, Department of Emergency Medicine, Haseki Research and Training Hospital, Istanbul, Turkey

*Corresponding author: Ozgur Sogut, University of Health Sciences, Department of Emergency Medicine, Haseki Research and Training Hospital, Istanbul, Turkey. Tel: +90-2123128456/2406, Fax:+90-2123139615, E-mail: drosogut@gmail.com

Received 2016 May 24; Revised 2016 September 14; Accepted 2016 October 12.

Abstract

Introduction: We present a case report of a healthy man who ingested a large number of well-manufactured cocaine packages to smuggle them across international borders.

Case Presentation: A 36-year-old man ingested cocaine packages worth approximately US \$900,000 to transport it from Dubai to Madrid. He was arrested by police at Istanbul Ataturk Airport for suspected body packing of drugs. On arrival to the emergency department of our tertiary-care university hospital in Istanbul, Turkey, he confessed that he had attempted to smuggle 76 packages of cocaine in his gastrointestinal tract. The patient complained of nausea, but did not have abdominal pain. The physical examination was unremarkable. Radiological screening showed many small packages in the abdomen. There were no signs of intestinal obstruction. In this case, repeat computed tomography of the abdomen confirmed complete evacuation. The patient was discharged into police custody six hours later, after passing the number of packets that he had reported to have swallowed.

Conclusions: Abdominal radiography and computed tomography are useful tools for in the evaluation of suspected body packers. Improved packaging material used by smugglers and a more conservative treatment approach have reduced the mortality and morbidity.

Keywords: Abdominal Radiography, Cocaine, Tomography

1. Introduction

The international drug trade uses various methods to transport illicit substances. Drug smuggling by internal bodily concealment, called 'body packing', is a widespread method of transporting narcotics (1, 2). People using this method are known as 'body packers', 'mules', 'internal carriers', or 'couriers'. The three main drugs smuggled in this manner are cocaine, heroin, and cannabis products. Almost all international studies reported cocaine is the drug most commonly smuggled by body concealment, followed by heroin (1, 3). Body packer syndrome is the term used to describe individuals who present with intestinal obstruction from impacted packets or specific drug toxicity due to rupture of one or more drug-filled packet (4). Smugglers present to hospital either after detection by customs, or following the development of symptoms and signs of ingested drug toxicity or intestinal obstruction (5). Currently available data suggest that careful monitoring of the body packers for possible signs and symptoms of drug toxicity and bowel obstruction is critically important (6).

Alipour-Faz et al. (6) conducted a retrospective study of 175 body packers in Iran and identified ingestion was the most common attempted methods of body packing followed rectal and vaginal insertions. Detection of body

packing is an important task for the emergency physicans because it requires immediate medico-legal attention and is potentially fatal due to packages can rupture, releasing lethal doses of drug into the body (7).

This report describes the management of a medicolegal male case who had swallowed a large number of cocaine-filled packages and had no concealed drugs remain once he was discharged.

2. Case Presentation

A 36-year-old Ghanaian man was referred to the emergency department (ED) of our tertiary-care university hospital (university of health sciences, Haseki governmental specialized training and research hospital, Istanbul, Turkey) in December of 2015 by airport narcotics police because he was suspected of concealing illicit drugs within his body. Urine obtained from the suspected body packer was immediately screened on-site by Cozart® rapid urine test. Rapid ürine testing for illicit drugs at the airport was positive for cocaine. On admission, his blood pressure was 120/70 mm Hg, pulse rate 76 beats per minute, respiratory rate 14 per minute, and body temperature 36.7°C. The patient had nausea, but no abdominal pain. He appeared well

and was conscious and oriented. Cardiopulmonary, abdominal, and rectal examinations were normal, and there were no signs of drug overdose or intoxication. He was asked about body packing, but he denied the use of illicit drugs.

A plain abdominal radiograph revealed multiple opaque foreign bodies in the gastrointestinal tract (Figure 1A). Non-contrast-enhanced three-dimensional (3D) abdominal and pelvic computed tomography (CT) showed multiple spherical capsules in the small intestine, colon, and rectum (Figure 1B). After detecting the capsules radiologically, he confessed to carrying about 1.35 kg of cocaine, pressed and wrapped into 76 packages weighing 18 g each. He had swallowed the packages of cocaine in Dubai two days before admission to our hospital. The urine drug screens performed in the ED including a rapid single-use, qualitative multidrug fluorescence immunoassay toxicology panel (Biosite triage diagnostics, San Diego, CA) was without evidence of benzodiazepines, barbiturates, alcohol or amphetamines except for cocaine. Laboratory tests including complete blood count, serum electrolytes, liver and kidney function showed no abnormalities, and his urine tested positive for cocaine metabolites, similar to the drug screen performed at the airport.

The patient was managed successfully with conservative measures, including enemas and laxatives. All of the ingested packages were evacuated spontaneously and the police secured and collected 76 intact swallowed packages of cocaine (Figure 2). CT 4 hours later showed that the abdomen was clear of cocaine packages with no signs of intestinal obstruction or perforation.

The patient was observed in the ED for six hours postarrest. No symptoms of cocaine toxidrome or other complications such as obstruction or ileus were observed. He was discharged into police custody. Analysis subsequently indicated that the cocaine was 75% pure and type III packages had been used. Table 1 describes the demographic and clinical characteristics of the case suspected of body packing.

3. Discussion

Body packing was first reported in the medical literature in 1973, and described a 21-year-old patient who had developed intestinal obstruction after swallowing a condom filled with hashish (3). Cocaine body packers usually ingest approximately 1 kg of drug, divided into multiple packages containing 3 - 12 g each. Rupture of even a single package may be fatal, because the lethal dose of cocaine ranges from 1 to 3 g (5). Our patient had ingested more than 1 kg of high-purity cocaine, in 76 packages that contained

Characteristics	
Demographic characteristics	
Age	36 years old
Gender	Male
Origin	Ghana
Drug type/ No. of packets	Cocaine capsules/76
Wrapping technique	Type III, sophisticated capsule material
Total value of the packages	US \$\$900,000.
Clinical characteristics	
Symptom	Nausea
Vital signs	Within normal limits
Physical examination	Unremarkable
Urine screen	Positive
Emergency department x-ray	Positive
Clnical course	Uneventful
Treatment	Conservative with laxative
Hospital length (hours)	6
Discharge criteria	Negative CT + 2 clean stools

18 g each. Only a few body packers able to swallow more than 1 kg of cocaine packages have been reported (2, 8).

According to the classification of McCarron and Woods, there are three types of drug smuggling packet: type I, thinly wrapped with rough knots; type II, medium quality with thin knots; and type III, an internal aluminum sheet and several latex coats closed with surgical-type ligatures. The risk of rupture of type I-III packets is high, low, and very low, respectively. The type of packet implies the likelihood of toxicity and the risk of surgical intervention, especially the risk of an endoscopic approach (9). Our patient was subjected to continuous medical surveillance, because of the large dose of cocaine packages located in the gastrointestinal tract, but none of the packets ruptured. The criminal investigation showed that our patient had swallowed cocaine-filled type III packages, which have the lowest risk of causing acute poisoning.

Cocaine is the most commonly smuggled drug transported by body packers due to its higher financial worth. The total value of the packages may range from US \$1,000 to over US \$1,000,000 (10). Consistent with the literature (10), our patient had swallowed 75% pure and type III cocaine-filled packages worth approximately US \$900,000 to smuggle them across international borders. The total value of the presented patient's ingested cocaine packages



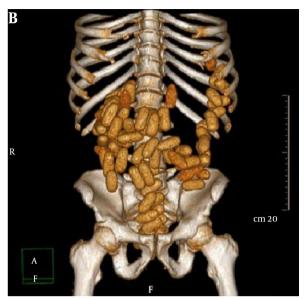


Figure 1. A, a plain abdominal X-ray shows multiple foreign bodies in the gastrointestinal tract; B, 3D CT reconstruction of the abdomen and pelvis shows numerous oval packages of cocaine throughout the gastrointestinal system



Figure 2. Intact Packages Containing Cocaine

are, to date, one of the highest reported values associated with body packers. Up to now, to our knowledge, no case report or case series regarding cocaine body packers has described both the wrapping technique and the total value which depends upon the purity of the ingested drug.

Body packers often present to hospital because lawenforcement officers require medical confirmation or exclusion of suspected body packing, as in our patient. Less commonly, these patients can present to the ED with acute narcotic intoxication, intestinal obstruction, or cardiac arrest. The mortality and morbidity of these cases was once high because of the low quality of packaging and the primarily surgical treatment approach (5). Improved packaging material used by smugglers and a more conservative treatment approach have reduced the mortality and morbidity (5, 9).

Body packers are often suspected because of unusual behaviors, such as using specific travel routes, sitting motionless, refusing to eat or drink during the flight, and a typical breath odor resulting from gastric acid acting on the capsules (11). Body packers usually use constipating agents, especially diphenoxylate or loperamide, after swallowing the capsules. After reaching their final destination, body packers use laxatives, cathartics, or enemas to help evacuate the capsules rectally (9, 11).

Positive drug levels in the blood and urine of body packers reveal that either the individual has used the drug in the previous days or that one or more packages are leaking (10). A relevant limitation of this case report is due to the lack toxicological data (e.g., the cocaine levels in the blood or urine of the presented body packer).

Indications for surgical treatment include gastrointestinal obstruction, perforation, acute narcotic intoxication, and retention of capsules beyond five days despite conservative management (1, 5, 11).

The lack of an antidote makes cocaine intoxication dangerous. Symptoms and signs of cocaine intoxication include anxiety, diaphoresis, tachycardia, hypertension, hyperthermia, mydriasis, hallucinations, convulsions, and cardiovascular collapse. ED staff should be aware of the clinical signs of cocaine toxicity during follow-up (12).

Our patient was managed conservatively with laxatives because he had no signs of complications. Most body packers are asymptomatic and do not experience complications since the packages transit spontaneously through the gastrointestinal tract (10). Our patient had an uncomplicated clinical course and was considered for discharge either two consecutive clean stools had been observed and follow-up abdominal CT demonstrated complete clearance of packets.

3.1. Conclusion

Abdominal radiography and CT are useful tools for screening patients suspected of body packing cocaine. Although our patient had swallowed a large number of cocaine capsules, he was managed conservatively and all of the capsules were evacuated uneventfully. This may be because of the sophisticated capsule material and packing technique, and the health of our patient.

Acknowledgments

We thank the department of radiology for its technical support.

Footnotes

Authors' Contribution: Study concept and design: Onur Kaplan; acquisition of data: Onur Kaplan and Ozgur Sogut; analysis and interpretation of data: Onur Kaplan and Mehmet Yigit; drafting of the manuscript: Onur Kaplan and Ozgur Sogut; critical revision of the manuscript for important intellectual content: Ozgur Sogut and Onur Kaplan; administrative, technical, and material support:

Onur Kaplan and Mehmet Yigit; study supervision: Ozgur Sogut.

Conflicts of Interest: The authors had no conflicts of interest to declare in relation to this article.

References

- Beckley I, Ansari NA, Khwaja HA, Mohsen Y. Clinical management of cocaine body packers: the Hillingdon experience. Can J Surg. 2009;52(5):417-21. [PubMed: 19865578].
- Markovits N, Kurnik D, Halkin H, Guranda L, Cohen A, Katz M, et al. "Body packers" in Israel: a case series. *Isr Med Assoc J.* 2013;15(10):639–45. [PubMed: 24266092].
- 3. Deitel M, Syed AK. Intestinal obstruction by an unusual foreign body. Can Med Assoc J. 1973;109(3):211–2. [PubMed: 4728949].
- Berger FH, Nieboer KH, Goh GS, Pinto A, Scaglione M. Body packing: a review of general background, clinical and imaging aspects. *Radiol Med.* 2015;120(1):118–32. doi: 10.1007/s11547-014-0458-0. [PubMed: 25300715].
- de Bakker JK, Nanayakkara PW, Geeraedts LJ, de Lange ES, Mackintosh MO, Bonjer HJ. Body packers: a plea for conservative treatment. *Langenbecks Arch Surg.* 2012;397(1):125–30. doi: 10.1007/s00423-011-0846-z. [PubMed: 21984212].
- Alipour-Faz A, Shadnia S, Mirhashemi SH, Peyvandi M, Oroei M, Shafagh O, et al. Assessing the Epidemiological Data and Management Methods of Body Packers Admitted to a Referral Center in Iran. *Medicine (Baltimore)*. 2016;95(19):3656. doi: 10.1097/MD.00000000000003656. [PubMed: 27175693].
- Asha SE, Cooke A. Sensitivity and Specificity of Emergency Physicians and Trainees for Identifying Internally Concealed Drug Packages on Abdominal Computed Tomography Scan: Do Lung Windows Improve Accuracy?. *J Emerg Med.* 2015;49(3):268-73. doi: 10.1016/j.jemermed.2015.02.009. [PubMed: 25934379].
- Bulstrode N, Banks F, Shrotria S. The outcome of drug smuggling by 'body packers'-the British experience. Ann R Coll Surg Engl. 2002;84(1):35-8. [PubMed: 11890624].
- McCarron MM, Wood JD. The cocaine 'body packer' syndrome. Diagnosis and treatment. JAMA. 1983;250(11):1417–20. [PubMed: 6887463].
- Cappelletti S, Piacentino D, Sani G, Bottoni E, Fiore PA, Aromatario M, et al. Systematic review of the toxicological and radiological features of body packing. *Int J Legal Med.* 2016;130(3):693-709. doi: 10.1007/s00414-015-1310-3. [PubMed: 26932867].
- Kucukmetin NT, Gucyetmez B, Poyraz T, Yildirim S, Boztas G, Tozun N. Foreign material in the gastrointestinal tract: cocaine packets. *Case Rep Gastroenterol.* 2014;8(1):56–60. doi: 10.1159/000358555. [PubMed: 24574951].
- Karch SB. Cocaine cardiovascular toxicity. South Med J. 2005;98(8):794-9. doi:10.1097/01.smj.0000168701.08879.3f. [PubMed: 16144174].