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Original article

The outcome of drug smuggling by 'body packers' – the British experience

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Body packing or internal concealment used by drug dealers to smuggle illicit substances, puts the body packer at risk of both imprisonment and death. We report our experience over a 4 year period from January 1996 to December 1999 of suspects presenting to our hospital (the largest series in Europe). A total of 572 cases were assessed radiographically and 180 were shown to be carrying foreign bodies. The commonest reasons for admission were suspected overdose or gastrointestinal obstruction. Thirty-six cases were admitted, of whom 7 required surgical intervention. No deaths occurred. Of all people detained for smuggling by internal concealment into Britain during this period, 27% were seen in our hospital. These cases may present alone or escorted by Her Majesty's Customs and Excise personnel, and one must be aware of this possibility even when situated away from a port of entry.

Key words: Body packers – Drug smuggling

The international drug trade is an ever-increasing problem with drug suppliers employing every method available to meet the demand for illicit substances.[1] The method of corporal concealment of illicit drugs in drug smuggling either by swallowing packets of drugs or inserting them in body cavities, was first reported in 1975.[2] The smugglers using this method are known as 'body packers', 'mules', 'swallowers' or 'stuffers'. Her Majesty's Customs and Excise (HMCE) refer to this class of smuggling as 'internal concealment'. The earliest experience was from the US, but this has now become a world-wide problem.

Our hospital is situated 2 miles from London's Heathrow airport, one of the busiest airports in the world. This ensures a steady flow of referrals to the accident and emergency department from HMCE of suspected body packers. Suspected smugglers may be detained after an intelligence tip off, information received from the attending flight crew or suspicious behaviour in Customs.

The suspect undergoes urine analysis for cocaine and opiates while being held by the HMCE, but this does not discriminate between smugglers and users. If tested positive, the suspect will be taken to the accident and emergency department for radiological investigation – initially an abdominal X-ray and occasionally a contrast meal. If foreign bodies are found, the decision whether to admit will be made. If there are no medical reasons for admission, they will be taken to a secure unit for close monitoring. The criteria for hospital admission are signs of gastrointestinal obstruction (abdominal pain, distension, vomiting, constipation) or drug toxicity dependent on the substance being smuggled. The National Poisons Information Service has useful literature that can be accessed 24 h a day regarding the problems faced in treatment of these patients.[3]

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Table 1 The details of the admitted body packers

	Age (years)	Sex	Nationality	Reason for admission	No of packages	Treatment	Stay (days)
1	18	F	UK	Gastric outlet obstruction	21	Surgery	5
2	26	M	Venezuela	Abdominal pain, cocaine toxicity	93	Bowel lavage	3
3	22	F	UK	Abdominal pain	32	Bowel lavage	2
4	47	M	Germany	Abdominal pain	54	Bowel lavage	5
5	44	M	USA	Cocaine toxicity	45	Bowel lavage	4
6	31	M	Somalia	Passed package wrapping	217	Bowel lavage	5
7	27	M	Panama	Abdominal pain	86	Bowel lavage	2
8	40	M	Ghana	Bowel obstruction	83	Bowel lavage	8
9	25	M	Columbia	Abdominal pain	36	Surgery	5
10	19	M	Columbia	Vomited package	Unknown	Bowel lavage	1
11	34	M	UK	Passed package wrapping	217	Bowel lavage	1
12	33	M	Jamaica	Abdominal pain	39	Bowel lavage	4
13	34	F	Jamaica	Abdominal pain	90	Bowel lavage	6
14	24	F	Jamaica	Abdominal pain	4	Surgery	5
15	37	M	Jamaica	Passed package wrapping	101	Bowel lavage	1
16	33	F	Jamaica	Cocaine toxicity	73	Bowel lavage	5
17	29	M	Jamaica	Abdominal pain	120	Bowel lavage	4
18	24	M	Jamaica	Passed package wrapping	62	Bowel lavage	2
19	34	M	UK	Gastric outflow obstruction	2	Surgery	4
20	24	M	Jamaica	Asymptomatic	12	Bowel lavage	1
21	35	M	UK	Abdominal pain	42	Bowel lavage	2
22	31	M	USA	Heroin toxicity, abdominal pain	18	Bowel lavage	2
23	23	F	Jamaica	Vomited packages, abdominal pain	56	Bowel lavage	2
24	37	M	Jamaica	Unable to pass packages	99	Surgery	8
25	22	M	Jamaica	Abdominal pain	unknown	Bowel lavage	1
26	32	F	UK	Abdominal pain	49	Bowel lavage	2
27	45	F	Jamaica	Abdominal pain	72	Bowel lavage	2
28	27	F	Jamaica	Abdominal pain	33	Bowel lavage	6
29	27	F	Jamaica	Abdominal pain	Unknown	Bowel lavage	4
30	32	F	Jamaica	Abdominal pain	109	Bowel lavage	9
31	28	F	Jamaica	Abdominal pain	64	Surgery	8
32	30	M	Jamaica	Asymptomatic	89	Bowel lavage	1
33	28	M	Jamaica	Asymptomatic	49	Bowel lavage	1
34	28	M	Jamaica	Abdominal pain	47	Bowel lavage	4
35	17	M	Jamaica	Abdominal pain	118	Bowel lavage	3
36	31	M	Jamaica	Cocaine toxicity	109	Surgery	6

Participants and study period

A retrospective study of all suspected smugglers brought to the accident and emergency department between January 1996 and December 1999 was carried out. The list was obtained from the hospital's coding and radiology departments. The accident and emergency records were studied along with the radiographic investigations and the hospital records of all admissions were accessed. A total of 572 suspected smugglers presented, in the company of HMCE personnel, for examination and radiographs for suspected internal concealment of drugs. Of the total 572 suspects, 180 had foreign bodies identified on abdominal films, and the remainder were discharged under the care of the HMCE. Asymptomatic body packers were generally allowed to return to the detention centre to pass the objects naturally. The 36 prisoners who were admitted mainly due to possible bowel obstruction or drug toxicity are listed in Table 1.

Results

There were 11 women and 25 men admitted with a median age of 30 years. The commonest nationality was Jamaican with 19 patients, followed by Great Britain with 6. The average number of packages found in each prisoner was 85. All admitted patients were closely monitored for neurological and respiratory signs. No patients required medical treatment or resuscitation because of an overdose, although suspected package rupture precipitated emergency laparotomy. Seven of the admitted prisoners underwent surgery while the remainder was successfully treated conservatively with oral purgation. There were no deaths reported. All packages were immediately taken by HMCE for evidence and no details of the contents were available.

Operated patients

Case 1, an 18-year-old female UK citizen, was admitted with symptoms of gastric outflow obstruction. She vomited 6

cocaine filled condoms and loose wrappings that had been ingested whole more than 24 h earlier and the outer wrapping had perished. A contrast meal (Fig. 1) confirmed gastric multiple foreign bodies with none distally. Due to the risk of imminent rupture, she was taken to theatre for laparotomy. A gastrotomy resulted in the removal of 15 cocaine-filled condoms that were too big to pass through the pylorus. No other packages were found in the small or large intestine giving a total of 21 packages. Recovery was uneventful and no further foreign bodies were passed. She was discharged after 5 days.

Case 2, 25-year-old Colombian, was admitted with distension, severe epigastric pain and tenderness 2 days after package ingestion. Abdominal radiograph revealed a number of uniform objects all situated in the stomach. Laparotomy and gastrotomy were performed and 36 packages were removed. He had an uneventful recovery and was discharged after 5 days.

Case 3, a 24-year-old Jamaican, ingested 4 home-made cocaine-filled packages 24 h before admission. The patient presented with gastrointestinal obstruction and contrast studies showed gastric foreign bodies. A laparotomy and gastrotomy were performed removing 3 large packages. A smaller package was found in the descending colon that was left to pass naturally. He made a quick recovery and was discharged.

Case 4, a 34-year-old UK citizen, presented 4 days after ingesting 2 packages. He presented with epigastric pain and radiographic examination showed 2 large foreign bodies in the stomach. These packages did not pass through the pylorus during the early stages of the admission. Therefore, the patient underwent gastrotomy and the 2 poorly wrapped packages (measuring 6 cm in length and 3 cm in width) were removed. The patient made an uneventful recovery and was discharged after 4 days.

Case 5, a 37-year-old Jamaican, had ingested 99 packages but only managed to pass 2 unaided. He experienced increasing left iliac fossa pain during his admission and became obstructed in the lower large bowel due to the mass effect of faeces and foreign bodies despite 4 days of maximal medical treatment. He underwent anal dilatation and manual evacuation on consecutive days to remove the packages. He made an uneventful recovery and was discharged.

Case 6, a 28-year-old Jamaican female, admitted with severe abdominal pain and epigastric distension who, despite retching, was unable to vomit. Radiograph demonstrated multiple packages within the stomach with no evidence of pyloric passage. At emergency laparotomy, gastrotomy was performed and 64 packages were removed. Postoperative recovery was delayed by a prolonged ileus and she was discharged 8 days later.

Case 7, a 31-year-old Jamaican who had ingested 109 packages, presented with abdominal pain but became agitated and violent which was thought to be due to a possible rupture. Emergency laparotomy revealed multiple foreign bodies throughout his colon, which were removed by gently 'milking' them through to the rectum and manual evacuation. The patient was admitted to intensive care postoperatively for 24 h. The apparent toxicity improved and he made an uncomplicated recovery, being discharged 6 days later.

Figure 1 Contrast meal showing multiple oval foreign bodies in the stomach.

Discussion

The international drug trade is an ever increasing problem with seizures rising in 1997 and 1998 by 14% and 8%, respectively.[1] The method of internal concealment or body packing was first reported in 1975[2] and is used by smuggling syndicates and by amateur lone smugglers. In 1998 alone, there were 211 people detained for attempted smuggling into Britain using this method (Robinson D, Home Office Research Development and Statistics Directorate, 20 April 2000, personal communication). Body packers put themselves at great risk and this is dependent on the type of drug being transported, the size of the parcels and the quality of packaging. There are reports of package rupture and death through drug overdose.[4–6] The need for surgical intervention due to suspected rupture,[7,8] gastrointestinal obstruction,[9] gastrointestinal ulceration[10] and even respiratory arrest due to the aspiration of a package[11] has been noted.

Suspected smugglers initially undergo urine drug testing as there is inevitably a degree of contamination from the ingested packages.[12,13] If this is positive, an abdominal radiograph is taken. The prisoners are accompanied by customs officers at all times including during any operative procedures to ensure the 'continuity of evidence', and that all evidence is dealt with appropriately.

When body packing was first noted, it was proposed that the foreign bodies should be removed either surgically or endoscopically on diagnosis.[14] It is now accepted that body packers could be safely treated conservatively with surgical removal if necessary.[15–17] The indications for surgical removal are intestinal obstruction, suspected rupture and drug overdose. In this series, the commonest indication for laparotomy was gastric out flow obstruction. The packages were either too numerous or too big to pass through the pylorus and thus required operative removal.

The early experience in dealing with body packers was from the US,[2,14,16,17] but this particular method of smuggling is becoming more common throughout the world.[7,12,13,18] Cases have been found in most of the UK's international airports but we have seen 27% of all people detained for smuggling by internal concealment into Britain during this period (Robinson D, Home Office Research Development and Statistics Directorate, 20 April 2000, personal communication). Due to the hospital's proximity to Heathrow airport, we have been able to report the largest series from a European hospital during this 4-year period.

This series shows that conservative management with oral purgation is the treatment option of choice even in patients with mild abdominal symptoms. Surgery should be reserved for cases where packages have failed to pass through the pylorus or other parts of the bowel and suspected rupture. This series compares well with other case reports and smaller series with regard to patients taken to surgery and outcome.

The detainees fall into two groups. Those associated with drug smuggling organisations ingest packages that are machine wrapped in polythene measuring 4 cm by 2 cm and contain 7–10 g of, usually, cocaine. The other group is the 'do-it-yourself' body packer. These packages are typically larger and are wrapped in various ways sometimes using condoms or plastic kitchen wrap. Two of the three cases with gastric outflow obstruction in our series were in the latter group.

It is important that surgeons dealing with acute patients are aware of the 'body packer' presenting with signs of drug toxicity due to package leakage or rupture, or symptoms of gastrointestinal obstruction. These patients may arrive, either accompanied by HMCE officers to units near to ports of entry, or unescorted having escaped detection to units further afield.

References

1. Corkery J. *Drug Seizure and Offender Statistics, United Kingdom, 1998*. London: Home Office Research Development and Statistics Directorate, 2000.
2. Mebane C, DeVito JJ. Cocaine intoxication: a unique case. *J Fla Med Assoc* 1975; **62**: 19–20.
3. National Poisons Information Service. *Body Packers and Body Stuffers: Clinical Features and Management*. London: National Poisons Information Service, 1996.
4. Introna FJ, Smialek JE. The mini-packer syndrome. Fatal ingestion of drug containers in Baltimore, Maryland. *Am J Forensic Med Pathol* 1989; **10**: 21–4.
5. Visser L, Stricker B, Hoogendoorn M, Vinks A. Do not give paraffin to packers [see comments]. *Lancet* 1998; **352**: 1352.
6. Joynt BP, Mikhael NZ. Sudden death of a heroin body packer. *J Anal Toxicol* 1985; **9**: 238–40.
7. al-Attia HM, al Murawy M, Hareb A, Gattee OB. Acute abdominal pain in a young man. *Postgrad Med J* 1997; **73**: 667–9.
8. Lancashire MJ, Legg PK, Lowe M, Davidson SM, Ellis BW. Surgical aspects of international drug smuggling. *BMJ* 1988; **296**: 1035–7.
9. Stewart A, Heaton ND, Hogbin B. Body packing – a case report and review of the literature. *Postgrad Med J* 1990; **66**: 659–61.
10. Miller JS, Hendren SK, Liscum KR. Giant gastric ulcer in a body packer. *J Trauma* 1998; **45**: 617–9.
11. Cobaugh DJ, Schneider SM, Benitez JG, Donahoe MP. Cocaine balloon aspiration: successful removal with bronchoscopy. *Am J Emerg Med* 1997; **15**: 544–6.
12. Nihira M, Hayashida M, Ohno Y, Inuzuka S, Yokota H, Yamamoto Y. Urinalysis of body packers in Japan. *J Anal Toxicol* 1998; **22**: 61–5.
13. Gherardi RK, Baud FJ, Leporc P, Marc B, Dupeyron JP, Diamant-Berger O. Detection of drugs in the urine of body-packers. *Lancet* 1988; **i**: 1076–8.
14. Suarez CA, Arango A, Lester JLD. Cocaine-condom ingestion. Surgical treatment. *JAMA* 1977; **238**: 1391–2.
15. Hoffman RS, Smilkstein MJ, Goldfrank LR. Whole bowel irrigation and the cocaine body-packer: a new approach to a common problem. *Am J Emerg Med* 1990; **8**: 523–7.
16. Caruana DS, Weinbach B, Goerg D, Gardner LB. Cocaine-packet ingestion. Diagnosis, management, and natural history. *Ann Intern Med* 1984; **100**: 73–4.
17. McCarron MM, Wood JD. The cocaine 'body packer' syndrome. Diagnosis and treatment. *JAMA* 1983; **250**: 1417–20.
18. Aldrighetti L, Paganelli M, Giacomelli M, Villa G, Ferla G. Conservative management of cocaine-packet ingestion: experience in Milan, the main Italian smuggling center of South American cocaine. *Panminerva Med* 1996; **38**: 111–6.