Methamphetamine: Body Sniffer

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INTRODUCTION

Methamphetamine, known on the streets as ice, meth, crystal meth, shabu, batu, tina, crack, crack, glass and speed, is easily synthesized requiring only rudimentary laboratory equipment and starting materials.\(^1\)\(^-\)\(^3\)

Methamphetamine is inexpensive, readily obtainable, and has a longer duration of action than cocaine. These factors have contributed to its increase in popularity over the years.\(^4\)\(^-\)\(^5\)

Methamphetamine is known to be smoked, swallowed, snorted, injected or inserted anally, shafting. Some people smoke it using a glass pipe, while others heat it on aluminium foil and inhale the vapors, chasing.

Methamphetamine exerts its effects by increasing the release of dopamine from vesicular stores and increasing extracellular dopamine by reverse transport. Methamphetamine also interacts with 5-HT transporters, N-methyl-D-aspartate and monoamine transporters subsequently affecting serotonergic, glutamatergic and noradrenergic neurotransmission.\(^5\)

**Body packer**, The transportation of illicit drugs by internal concealment. Most body packers swallow packets, insertion of packets into the rectum and vagina.\(^7\)\(^-\)\(^8\)

**Body stuffing**, occasionally and inappropriately used synonymously with body packing, refers to the swallowing of relatively small amounts of loosely wrapped drug because of the fear of arrest.\(^10\)

CASE REPORT

An African man, 29-year-old, was brought to the hospital after detention for illegal substance possession. 3 hours prior to emergency department, patient, a drug dealer, was deceived by undercover officers into selling some illicit drugs. While he was dealing with the officers, he wised up, and then swallowed the white bag 2x2x3 cm in size, which was thought to be plastic wrapped methamphetamine.

At emergency examination room, the patient’s appearance is tall, muscular man. His face and extremities were full of multiple abrasion and contusion wounds. His vital signs were stable. Cardiovascular, respiratory, and gastrointestinal system were unremarkable. There were no signs of sympathomimetic toxidrome.

An initial investigation was radiological study; acute abdomen series. The plain abdominal film was normal; there were neither foreign body seen, nor abnormal free air. The next step was aim to get rid of any disguise substance, the whole bowel irrigation was done with Polyethylene glycol via nasogastric tube feeding. Finally, the patient was referred to the other hospital due to the officer’s protocol.

DISCUSSION

An accused man confirmed that he did not swallow any illicit drug many times and ask the clinician to surgical explore to prove what he said. In history taking, a detailed history should be obtained, including information about the drug
packets (the type of drug, the number of packets, and the nature of the wrapping) and gastrointestinal symptoms (pain, bloating, vomiting, obstipation, and constipation). However, they are often dishonest historians.

For physical examination, Vital signs, mental status, pupil size, bowel sounds, and skin findings may help identify drug-induced toxic effects in a body packer if a package leaks or ruptures. In this patient, the is no abnormal finding.

Diagnostic testing is divined to radiographic evaluation and urine toxicology testing. Plain film abdomen was requested for initial radiographic study. Although the study in this case was negative, Sensitivity of this screening test is about 85-90%. Several specific signs on the abdominal radiograph may suggest the presence such as multiple radiodense foreign bodies, a “rosette-like finding” formed by air trapped in the knot where a condom is tied11 and a “double-condom” sign12, in which air trapped between layers of latex makes them more visible. The last finding may also suggest a loss of integrity of the packing material.13

Contrast-enhanced CT easily identifies drug packets, which typically appear as foreign bodies surrounded by a small amount of gas. CT is more sensitive than plain radiography.

Further management:

For asymptomatic body packing patients, several large studies of such conservative management suggest that the rate of failure, defined as any indication for surgery, is only about 5 percent.14-16 For body stuffing, the rate of failure should be lower than body packing.

Unless the patient is being prepared for immediate surgery, gastrointestinal decontamination should be attempted. Activated charcoal reduces the lethality of oral cocaine, and 1 g per kilogram of body weight (up to 50 g) should be administered by mouth every four hours for several doses. The efficacy of naloxone limits the clinical importance of activated charcoal in heroin body packers.

Whole-bowel irrigation with a polyethylene glycol–electrolyte lavage solution results in a relatively gentle evacuation of the gastrointestinal tract and is safe for use in body packers.16 We administer a polyethylene glycol–electrolyte lavage solution at a rate of 2 liters per hour in adults — a rate that frequently requires the use of a nasogastric tube. Whole-bowel irrigation should be continued until complete clearance of the gastrointestinal tract is documented. The use of oil-based laxatives, although occasionally recommended, should be avoided because they reduce the tensile strength and “burst” volume of latex products.17 A massive gastrointestinal release of cocaine has been reported after the administration of oil-based laxatives.18

The next plan is whole bowel irrigate using polyethylene glycol (PEG). Observation is needed until the packets pass per rectum. Because of this reason, chain of custody and the officer’s protocol, the police general hospital is more appropriate.

Alternative choices for decontamination including:

- **Agents affecting motility.**
  The combined use of the promotility agents erythromycin and metoclopramide was reported to be safe in the treatment of two body packers,19 but further data are necessary before this combination can be routinely recommended.

- **Endoscopy.**
  Although successful endoscopic removal of packets from the stomach has been reported, the risk of packet rupture during the procedure has led others to caution against it. Packets that are accessible to the endoscopist most likely represent only a fraction of the gastrointestinal burden, and the risk of rupture inherent in removing the packets usually outweighs the benefit. The patient in whom only one packet fails to pass the pylorus may be the exception; endoscopy in such a patient may be a reasonable alternative to surgery. Although heroin packets can be removed endoscopically in an intensive care unit in which naloxone is available, cocaine packets should be removed only in the operating room, with a surgical team prepared to intervene in the event of packet rupture.

- **Surgery**
  Surgery is indicated for patients with acute cocaine poisoning or gastrointestinal obstruction or perforation. One or more enterotomies are made, preferably in the sterile portion of the gastrointestinal tract, and the intestinal contents are “milked” toward either the incisions or the anus. Bowel cleansing as a result of prior aggressive administration of polyethylene glycol–electrolyte lavage solution may obviate the need for colostomy in some cases. After surgical emptying of the gastrointestinal tract, a final radiographic study (abdominal CT or barium-enhanced radiography) should be performed to document that the gastrointestinal tract is clear, since packets may be missed during the intraoperative evaluation.20-21
REFERENCES
