INTRODUCTION

Body packing is the term used for intracorporeal concealment of illicit drugs in an attempt to smuggle them across secure borders. These drugs mainly comprise opium, heroin, cocaine, 3,4-methylenedioxymethamphetamine (ecstasy), amphetamines, and marijuana or hashish.1 Body Stuffing on the other hand refers to the acute ingestion of relatively small amount of illegal drugs (so also called ‘mini-packers’) in order to avoid imminent apprehension by authorities but can also lead to acute massive intoxication and aspiration.2,3 Body packers may also be called swallowers; internal carriers; couriers or mules.1 A body packer usually carries about 1 kg of drug, divided into 50-100 packets of 8-10 gram each, although persons carrying more than 200 packets have been reported.4 Each pack of opium, heroin, cocaine, or amphetamines has a potentially life-threatening dose of the drug.2 These drugs are wrapped in the form of capsules, condoms, balloons, plastic bags, or fingers of latex gloves with an outer hard wax coating, and then concealed in various anatomic cavities or body orifices.1 Aluminum foil, plastic food wrap, carbon paper, or other materials may be incorporated to alter the radiodensity, in an attempt to limit the risk of detection.2 We report a case of ‘heroin body packer’ presenting with respiratory arrest.

CASE REPORT

A male, aged 35 years, was brought from Islamabad International Airport in an unconscious state with gasping respiration. There was one hour history of progressive decline in level of consciousness started during flight. There was no preceding history of chest pain, dyspnea, high-grade fever, head injury, or fits. The patient developed respiratory arrest soon after arrival in ER, so immediate endotracheal intubation was done. The patient was shifted to intensive care unit and placed on mechanical ventilatory support. Clinically, he was a young man of average built. Blood pressure was 130/80 mmHg and pulse was 110/minute with regular rate and rhythm. There was no spontaneous respiration and GCS was 4/15. Pupils were constricted with sluggish and minimal reaction to light. There was no fever, neck rigidity, or skin lesions. Auscultation of chest and precordium were normal and so was rest of the systemic examination. Afterwards an attendant shared the possibility of a drug abuse. Based on clinical features, namely deterioration in the level of consciousness along with respiratory depression and constricted pupils, a provisional diagnosis of opioid poisoning was considered. In the meantime, blood and urine samples were taken for opioid metabolites, cannabis and benzodiazepines. After 6 hours of mechanical ventilatory support, patient gradually regained consciousness and the ability to move all the four limbs. He could not be weaned off from the ventilator due to poor respiratory effort. A therapeutic trial of Injection Nalaxone was given, to which he responded and after a weaning T-tube trial, he was weaned off ventilatory support on maintenance nalaxone infusion.

The laboratory parameters including blood complete picture, urine routine examination, liver and renal function tests were normal. The electrocardiogram was also normal. A portable X-ray chest showed normal lung fields with some radiodense shadows near gastric bubble while X-ray plain abdomen (Figure 1) showed multiple ovoid radiodense shadows predominantly occupying right half of the abdomen. The presence of abdominal radiodense shadows with features of opioid (likely heroin) toxicity was consistent with body packing. A detailed interview with patient confirmed the body packing with heroin. He was managed conservatively.

ABSTRACT

Intracorporeal concealment of illicit drugs known as ‘body packing’ is uncommonly reported. A body packer with swallowed capsules containing Diacetylmorphine (heroin) for smuggling purposes presented with respiratory arrest and recovered after ventilatory support and nalaxone infusion.

Key words: Diacetylmorphine. Body packing. Respiratory arrest. Intracorporeal concealment.
with laxatives and expelled 64 intact heroin rubber capsules (Figure 2). He admitted to have ingested diacetylmorphine (heroin) capsules purposefully for smuggling and rupture of only a few of them had lead to the features of heroin toxicity. The urine sample was positive for opioid metabolites.

Patient was reported to relevant authorities and series of laxative enemas yielded 62 capsules containing heroin. Patient made a smooth recovery and is currently under trial under antinarcotics act.

Diacetylmorphine (heroin) body packer presenting with respiratory arrest

**DISCUSSION**

Body packers usually present to health care providers for drug-induced toxic effects, intestinal obstruction, or medical assessment after arrest for drug trafficking. Body packing should be suspected in anyone with signs of drug-induced toxic effects after a recent arrival on an international flight or when there is no history of recreational drug use. This patient developed life-threatening heroin toxicity from leakage of the contents into his bowels. Although, a detailed history is pivotal but in rare cases, like in this case, patient may be unable to provide a history owing to profound drug-induced toxic effects and a high index of clinical suspicion should be kept for diagnosis in appropriate situations.

Plain abdominal radiography has a sensitivity of 85-90%, and may have several specific signs to suggest the presence of body packing: multiple radiodense foreign bodies (like in this case), a "rosette-like finding" formed by air trapped in the knot where a condom is tied and a "double-condom" sign, in which air trapped between layers of latex makes them more visible. The data is scant on the use of ultra-sonography for the evaluation of body packers but may show hyper-echogenic linear or round structures with acoustic shadowing. In a large study, ultrasound had a diagnostic accuracy of 94%, and only required 5-10 minutes. Contrast-enhanced CT scan is more sensitive than plain radiography and easily identifies drug packets, which typically appear as foreign bodies surrounded by a small amount of gas. CT has been used experimentally to identify the contents of packets on the basis of differences in the Hounsfield units (cocaine has a value of -219 Hounsfield units, and heroin, a value of -520), although this approach has not been validated in clinical practice.2

Symptomatic "Heroin Body Packer" can usually be treated conservatively with a continuous infusion of naloxone hydrochloride (Narcan). Naloxone is a competitive antagonist at the mu, kappa, and delta opioid receptor that reverses the depression in mental status, hypoventilation, pinpoint pupils, decreased bowel motility, and piloerection of opiate overdose. However, it will not reverse opiate-induced acute lung injury.2 Naloxone should be given in increments of 2-5 mg until there is a clinical response. The dose that elicits a response should then be given hourly as a continuous infusion. In certain cases, enormous amount of drug may be released when a packet ruptures, and very high doses of nalaxone may be necessary. Once general condition stabilizes, body packers with symptomatic heroin poisoning can be treated conservatively and expectantly until the packets pass.6,10 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.2

Emergency physicians should suspect body packing and ask for abdominal X-rays in patients with signs of drug-induced toxic effects like respiratory depression, or abnormal behaviour, especially after a background history of recent arrival on airport terminals.

**REFERENCES**