



Emergency service management of bodypacking cases caught on the highway outside the borderline

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Abstract

While drug trafficking is a major problem worldwide, body packing involving the storage of narcotic drugs in the human body represents an emergency because of the risk of deadly narcotic toxicity, intestinal obstruction and visceral perforation. We presented the evaluation of body packer cases, which have not been seen before in this region, in the emergency clinic. This study analyzes the medical records of body packers from January to July 2023. Hematological and biochemical tests, abdominal radiographs and tomographies, and removed packages were evaluated in all cases. Nine body packer cases carrying narcotic substances were observed in this study. The mean age was 33 ± 6.3 , 2 (22%) were female and 7 (78%) were male. None of the patients required emergency surgery. One patient had acute narcotic intoxication. In this patient, whose packages were observed to be intact, drug intoxication was associated with substance use. Abdominal radiography diagnosed all cases and all were recovered and discharged. It is very important for public safety to diagnose body packing cases and prevent the transport of packages. In this issue, emergency physicians should have radiography and CT imaging features in asymptomatic body packing cases.



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Introduction

Body packing (filling the body with package); refers to the illegal transportation of drugs within or outside the country's borders through in-body concealment of packaged illegal substances. Body packers, commonly referred to as "swallowers", "drug mules", "couriers" or "internal carrier" typically transport one kilogram of narcotics, broken up into 50–100 packets weighing 8–10 g a piece [1]. Body packing is a procedure carried out by voluntarily or forcibly, by men, women, children and pregnant women, by swallowing or pushing illegal drugs into the anus, vaginal tract or external auditory canal [2–5]. In this technique, a variety of illegal substances, such as heroin, cocaine, hashish, amphetamines and "ectasia" can be carried [6]. These medications are firmly enclosed in sheaths made of latex or cellophane, wrapped in several layers of the material, and sealed with a hard wax covering that varies in density. Other materials such as carbon paper or aluminum foil are often integrated into the packaging to avoid detection by radiographic imaging [4,7]. However, the internal packaging of drugs entails a significant risk

of acute narcotic toxicity due to the possibility of package rupture, releasing stored medication that the digestive system might absorb quickly [7,8]. In patients brought to the hospital with symptoms of acute narcotic toxicity, packages can be detected in radiographic examinations, as well as carriers using the airlines can be detected by controls and device scans and brought to the hospital by security teams [9]. On the other hand, it is known that it is not possible to detect body packers who try to enter countries through the international airline where device inspections are carried out most intensively. The carriers brought to our clinic crossed the border and were caught by the security forces in our region due to their suspicious behavior while traveling by highway. It is thought that in our region, which is 600-700 km from the border, there have been no such cases before and the carriers prefer the highway because they can easily circumvent the scans. Unfortunately, in addition to being a serious public safety issue with body packers, body packs containing narcotics can also cause serious health emergencies to the carrier.

This study presents the management of body packing case series in the emergency room, which applied to our clinic between January and July 2023.

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Case Report

In this study, we present a case series consisting of 9 patients who were brought to the emergency department with suspicion of being body packers between January and July 2023. Two of the cases were female, and seven were male, with an age range of 26 to 42. The general condition of eight of the patients was good, and all vital signs were stable. In one case, involving a 39-year-old male patient with a GCS of 3, pupillary miosis, TA of 90/60 mmHg, SaO₂ of 89%, NA of 118/min, and RR of 22/min, the patient was intubated, and 1 mg naloxone was administered. Pellet-shaped packages were observed in the abdominal X-rays and tomographies of all patients (Figure 1A, 1B, 2A). Hematological and biochemical tests were normal. In all 9 cases, the drug parameter tests were positive for opioids, methadone, and methamphetamine. The patients were transferred to intensive care due to the risk of perforation, intestinal obstruction, and opioid toxicity that may develop due to the packages. The intubated patient was successfully extubated 6 hours later. The packages in all cases were expelled with laxative administration within 1 to 3 days (Figure 2B).

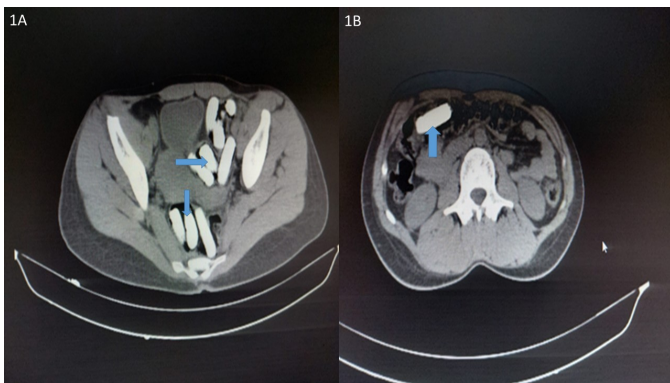


Figure 1. Abdominal CT images of the patients (arrows shows the packages).



Figure 2. Direct abdominal X-ray (A) and ingested packets obtained from patients (B) (arrows shows the packages).

Approval for the study was granted by the Erzincan Binali Yildirim University Human Research Ethical Committee Ethics statement (22.06.2023 -13/08). All patients were informed about the research and consented to take part in it.

Discussion

Body packers can come to the emergency room in cases that require urgent intervention such as tearing drug packs or intestinal obstruction, or they can be brought by security forces for forensic examination. Body packing is applied by professional drug couriers for the transport of illegal drugs, especially cocaine, heroin, methamphetamine and cannabinoids. Constipating agents such as diphenoxy-late or loperamide are used to prolong the transit time after swallowing the packages, and the transit times can be extended from one day to three weeks, depending on the travel time [10]. It was determined that all packages were removed after 24-36 hours due to laxative administration in cases brought to our emergency department. Radiological methods such as plain radiography, computed tomography (CT), ultrasound, and magnetic resonance can be used to detect illicit drugs in body packaging. Plain radiography may be insufficient as the offender is released if misinterpreted [11]. Therefore, emergency physicians should be familiar with the radiological features of such patients. Pellets were detected in the direct radiographs of all patients in this case series, and the patients were followed up. In the evaluation of bodypacking cases, which is a social and medico-legal event, not only the packages be defined, but also accurate information should be given about the number and exact location of the packages since it is a forensic event [12]. Packages come in two forms, drugs in solid form and liquid form (cocaine). It is known that packages with liquid-form contents are more difficult to see on plain graph [13]. All of the packages that came out of the patients who applied to our clinic were in solid form, so they were quickly diagnosed with direct radiography and were taken to the emergency intensive care unit.

A single low-dose CT scan of the abdomen is known to assist in the safe clinical management of suspects by providing accurate diagnoses in most cases. Performing CT scans with contrast reduces the risk of seeing packets, so CT without contrast should be preferred [14]. In all of these cases, non-contrast CT images showed smooth-circumscribed tubular foreign bodies in the stomach, intestinal loops and rectum. The well-limited packages have prevented complications that may develop due to their content. Loss of consciousness observed in only one patient was attributed to the substance used by the patient himself.

Body packing complications can result in severe and potentially fatal outcomes, both from narcotic and non-narcotic sources. Therefore, timely diagnosis is essential. It can be quite difficult to make an accurate diagnosis, as most body packers do not show any symptoms initially. Only 1-2% of body packers show clinical symptoms, but a wide range of gastrointestinal, neurological or cardiovascular complaints may also be encountered. Complications may develop due to many factors such as clinical appearance, type and amount of drug, packaging type, retention time in the body, degree of tearing if ruptured, location of packages in the gastrointestinal system or courier's overall health. Accurate diagnosis is extremely difficult due to diagnostic ambiguity, the patient's resistance to cooperation, and their reluctance to provide their medical history. Clinical symptoms due to complications associ-

ated with body packaging are now rare, possibly due to advances in drug packaging. However, it is known that mortality can be up to 56% when symptoms occur [15]. In this case series, none of the patients required emergency surgery and no mortality was observed. Following assessment, the majority of asymptomatic patients may be safely released from the hospital. Emergency surgery is recommended for blockage and perforation as well as for body packers suffering from cocaine intoxication and some cases of heroin poisoning [16]. Rupture of medication cup leads to rapid intestinal drug absorption with potentially fatal consequences [17]. As a result of bundle rupture, approximately 75% of bodypackers experience typical cardiovascular complications such as myocardial infarction, hypertension, tachycardia, ventricular fibrillation, and even cardiac arrest. Neurological symptoms include agitation and anxiety, seizures or altered consciousness, often up to coma. In 25% of instances, intestinal obstruction is the primary cause of symptoms linked to the digestive system [18]. Only one (11%) of the patients brought to our clinic by the security teams had clouding of consciousness and did not respond to painful stimuli, while the other patients were followed up as asymptomatic cases. It is known that the number of ingested drug packages is not related to the perforation rate. Up to 5% of medication packages require surgical removal when natural intestinal transit fails [7]. In asymptomatic patients, it is recommended to start activated charcoal, which reduces lethality in oral cocaine intoxication. In the physical examination, vital signs, mental status, pupil size, bowel movements and skin findings should be evaluated. Opioid toxicity is manifested by a depressed level of consciousness. Pupillary miosis, central nervous system (CNS) depression, and respiratory depression together constitute the clinical triad that indicates the possibility of opioid poisoning. Cocaine overdose causes behavioral changes, anxiety, euphoria, acute toxic psychosis, mydriasis, muscle stiffness, fever, sweating, tachycardia, and hypertension followed by seizures and cardiovascular collapse [19]. Intestinal irrigation with polyethylene glycol can be used to ensure disposal of packages containing narcotic. Due to the increased danger of puncturing the latex dressing, oily laxatives should not be used. For these individuals, a minimum of 72 hours and a maximum of 7 days should be observed. Asymptomatic body packers should be monitored closely, preferably in the intensive care unit, this ensures a rapid response in case of complications or clinical deterioration. Surgery is indicated in cases of intoxication, intestinal obstruction, and extended intestinal transit. Emergency surgery is vital in patients with no outlet for more than 48 hours and suspected leakage. Schaper et. al. [13] reported that only 32% of symptomatic patients survived until surgery and most of them died before the intervention started. Other rare emergencies were gastric outlet syndrome, gastrointestinal ulceration, or respiratory arrest due to bleeding and airway obstruction of packages [20]. Radiological imaging should be repeated to document removal of all packages after surgery [7]. Patients who have all their packages removed and no complications develop can be discharged. In body packing cases applied to our clinic, the patients who did not have any additional symptoms

or complaints after two stools that did not contain the package were discharged and handed over to the security teams.

Conclusion

Despite the serious health risks, intracorporeal carriage of illicit drugs for international transport is increasing. Emergency physicians should be familiar with the imaging features of radiography and CT in asymptomatic body packing cases. Thus, it is very important for public safety to diagnose patients and prevent the transport of packages. In order to minimize morbidity and mortality in patients, as well as to deter body packing or pushing, it is important to follow up patients in the emergency intensive care unit, both to screen for the presence of packages and to investigate possible clinical complications after they are brought to medical attention.

Ethical approval

Approval for the study was granted by the Erzincan Binali Yildirim University Human Research Ethical Committee Ethics statement (22.06.2023 -13/08).

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