A Case of a Contraband Body Packer Requiring High-Dose Naloxone

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Abstract

Background: Body packers occasionally refer to the Emergency Department (ED), after leakage of package contents within intestinal lumen, resulting in life-threatening toxicities, depending upon the nature of the chemical product.

Case Presentation: We present a case report of a patient presented with sudden onset of drowsiness while he was on board a flight. He was brought in by the airport security staff. On arrival to the ED, his Glasgow Coma Scale (GCS) was 3/15 and pupils were pinpoint bilaterally. He was empirically treated with Naloxone on clinical suspicion of narcotic overdose. He required a cumulative dose of 12 mg of Naloxone for reversal of respiratory depression and coma. On subsequent investigation in the ED, he was identified to be a body packer.

Discussion: This case represents a rare clinical example of narcotic overdose which resulted in a life-threatening opioid toxicity due to leakage of the package contents into his bowels. In this case, a dosage greater than 10 mg of the maximum recommended dose of Naloxone is required for reversal of toxicity.

Conclusion: It is imperative to have a high level of suspicion for managing possible opioid intoxication as immediate treatment can be diagnostic and lifesaving. Our case required more than the recommended dosage of Naloxone, highlighting the possible suggestion of further studies to look into the maximum threshold of this reversal agent.

Keywords: Body Packer; Coma; Overdose; Narcotic; Naloxone


INTRODUCTION

Body packers are people who smuggle drugs of abuse by concealing them inside their bodies. The parcels are made of different materials, frequently condoms, which are effortlessly available. The parcels are embedded through the mouth, rectum or vagina, so that they could be transferred to the other side of the borders without being caught. Cocaine, Heroin, Amphetamine, 3,4-methylenedioxyamphetamine (MDMA, “Ecstasy”), Cannabis and Hashish have all been accounted for being transferred via body packing. Up to 1 kg of drug, isolated in 50-100 parcels, can be transferred by one person. Body packers (frequently known as mules or swollowers) take constituting medications like Atropine-Diphenoxylate for decreasing the gastrointestinal transfer duration, so that it might take them from days to weeks for transferring all the parcels. The first revealed body packer, that gulped a condom loaded with Hashish, was arrested in Toronto in 1973 (1). From that point forward, the carrying of illegal medications has turned out to be progressively normal (2-5). Despite the fact that body packers are young fellows, the utilization of youngster and pregnant ladies has additionally been accounted for (6, 7). The two most well-known illicit medications transferred to the USA are Cocaine and Heroin. Body packers often go to medicinal services suppliers for one of these three reasons (8): drug inebriation, intestinal obstruction, or medical appraisal after detainment or capture. Death may occur due to toxic overdose, if the packet breaks.

CASE PRESENTATION

A 42-year-old man was brought to the Emergency Department (ED) by the airport security staff when he suddenly became unconscious during a flight departing from Peshawar (Pakistan) to Muscat (Oman). The plane made an emergency landing in Karachi in order to provide immediate medical care to the patient. On arrival, his Glasgow Coma Scale (GCS) was 3/15 with pinpoint pupils bilaterally and a shallow breathing pattern. His heart rate was 124/min and blood pressure was recorded to be 240/110 mmHg. A 12 lead Electrocardiogram showed Q wave infarct in inferior leads. His blood sugar level was 298 mg/dL and Arterial Blood Gas (ABG) analysis was pH:7.18/pCO2:54.2/pO2:53.3/Bicarbonate:20.1/Oxygen Saturation: 82.5%. No family history of drug overdose or drug abuse was found. His last intake was when he was on board an international flight from Peshawar to Karachi. On arrival, he was brought to the Emergency Department by the airport security staff. His Glasgow Coma Scale (GCS) was 3/15 and pupils were pinpoint bilaterally. On arrival, he was empirically treated with Naloxone on clinical suspicion of narcotic overdose. He required a cumulative dose of 12 mg of Naloxone for reversal of respiratory depression and coma. On subsequent investigation in the ED, he was identified to be a body packer.
members were available at the time to provide collateral history. He was treated with Thiamine and Naloxone in the ED. In response to medication, his pupils flickered raising the possibility of opioid intoxication. He was later given 2 mg of Naloxone, which slightly improved his GCS and his pupils dilated slightly. With a strong suspicion of Narcotic overdose, we kept on giving Naloxone up to a total dose of 12 mg, which finally raised his GCS towards 11/15, with pupils being dilated to 4-5 mm bilaterally, respiratory rate being improved to 10 breaths/minute and oxygen saturations being improved to 94% on facemask oxygen at 10L/min. Hence, an infusion of Naloxone at 8mg/hour was initiated. The rest of his laboratory tests including Complete Blood Count, Serum Creatinine and Electrolytes, Liver Function tests, and Coagulation Profile were found to be within normal limits. A CT scan of the brain was performed, which was unremarkable. The patient’s family was also contacted and they reported that the patient had a history of hypertension and ischemic heart disease. During the ongoing resuscitation, the patient vomited 3 packets of Heroin (Figure 1). Subsequently, a plain abdominal X-ray was performed, which showed numerous packets within the intestinal loops, approximating to a total of 100 in count (Figure 2).

The patient’s GCS continued to improve and became normal after 1 hour of starting the Naloxone infusion. After which, it was tapered to 4 mg/ hour, that resulted in a reduction of his GCS, requiring us to continue the infusion at 8 mg /hr. He was provided with colonoscopic solution via nasogastric tube for gut decontamination. Law enforcement agencies and the anti-narcotic force were involved. They took the patient in custody and decided to move the patient to a government-based medical hospital for continuation of care.

**DISCUSSION**

Body packing for smuggling of illicit drugs is a worrisome problem at borders and airports of several countries. In order to detect these body packers, several clues such as refusal to eat or drink on flight are described in the literature. Smuggling of cocaine through body packing is a typical issue at the United States airports and heroin body packing is by all accounts more prevalent in Europe (9). The utilization of body packing as a method for smuggling unlawful medications can be to a great degree perilous in light of the danger of spillage or blasting of parcel substance (10). There is no factual information for drug dealers around the world, on the grounds that just a minor number of them get captured. Notwithstanding, the quantity of undetected cases is without a doubt high.

“Body packing syndrome” is a term which was first coined in 1981, when 10 body packers died while transporting cocaine. A sudden death can be seen in “body packing disorder” because of deadly intense inebriation, intestinal block and insanity. In any case, intense inebriation is the most well-known reason for death (11). Our patient developed life-threatening opioid toxicity due to the leakage of package contents into his bowels. Body packing is ought to be suspected in anybody with symptoms of drug-initiated poisonous effects after a recent entry in an international flight or when there is no history of recreational medication utilization. A detailed account of history should always be obtained, keeping in mind that body packers can be dishonest historians. On rare occasions, as in our case, patients may be unable to provide a history owing to profound drug-induced toxic effects. Collateral history should be sought, if possible. A thorough clinical examination will also be highly useful for the astute emergency physician (12).

Our case is also unique in that it highlights that 10 mg dose of Naloxone, as reported in the literature, to be the maximum recommended dose may not be enough and a higher dose may be required to reverse coma in certain cases. Naloxone carries a very little adverse effect, for which reason, it is empirically recommended as a component of coma cocktail. The only concern with higher doses is the possibility of withdrawal in
chronic addicts. Our patient did not suffer any adverse outcome, nor did he develop withdrawal effect.

Opiates overdose results in central nervous system and respiratory depression, pulmonary edema and finally death. Patients suspected of being body packers require abdominal radiography. Patients who become symptomatic, as did our case, should be reversed with antidote administration, e.g., Naloxone and Whole Bowel Irrigation (WBI) with Polyethylene Glycol until all the packets are recovered in stools (13). Alternatively, endoscopic removal of packets may be attempted, provided the necessary expertise is available, as significant complications may occur—for instance, packet rupture leading to toxic overdosage and death (14). In the case of gastrointestinal tract obstruction, immediate laparotomy should be performed.

CONCLUSION

Our case represents a rare example of narcotic overdose, which developed life-threatening opioid toxicity, due to leakage of the contents of these packages into bowels. It also required greater than 10 mg of maximum recommended Naloxone for reversal of toxicity. High level of suspicion is of paramount importance to the emergency physician, as immediate treatment can be lifesaving.

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REFERENCES


