

## Body-Packing: A Rare Diagnosis to Keep in Mind

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### ABSTRACT

Body packing was first described in 1973 and refers to the intracorporeal concealment of illegal drugs, which are swallowed or placed in anatomical cavities and/or body orifices. The body packer can be asymptomatic or can have signs of systemic drug toxicity (neurological, cardiac, abdominal, renal and cutaneous) due to rupture of the packet(s) or symptoms of gastrointestinal obstruction or perforation. The diagnosis is established based on a suggestive history, findings on physical examination and laboratory findings and/or imaging. The vast majority of patients are asymptomatic and are treated conservatively. However, complex situations may require surgical intervention. We present a case of a 50-year-old man who was admitted in the emergency department with a generalized tonic-clonic seizure and vomiting with plastic film, which raised the suspicion of foreign body ingestion, confirmed by imaging and laboratory tests. He underwent exploratory laparotomy to remove the packages.

### LEARNING POINTS

- Body packing is a potentially lethal activity.
- Body-packers can be asymptomatic, or have signs/symptoms of systemic drug toxicity or gastrointestinal obstruction or perforation.
- It is essential to recognize this condition so that the correct clinical approach, diagnosis and management can be established.

### KEYWORDS

Body-packing, cocaine, gastrointestinal obstruction

### CASE DESCRIPTION

The authors present the case of a 50-year-old healthy man, born in Cape Verde, who was admitted in the emergency department due to an inaugural generalized tonic-clonic seizure. The patient presented with marked psycho-motor agitation, confused speech, hypertension and tachycardia. Because he was vomiting with plastic film, a nasogastric tube was placed with drainage of white powder residue. An x-ray of the abdomen showed the presence of multiple foreign bodies in the stomach and colon (*Fig. 1A*). A CT scan of the abdomen also revealed multiple radio-dense packages filling the entire stomach and colon (*Fig. 1B,C*). Due to the suspicion that this was a body-packing case, blood and urine tests for toxic substances were requested and revealed urinary cocaine levels of 9,363 ng/ml at admission and 26,400 ng/ml after 12 hours (reference value <300 ng/ml), which confirmed the diagnosis of cocaine intoxication. The patient underwent immediate exploratory laparotomy, with the removal of 71 packages of cocaine (*Fig. 2A,B*). His clinical course during hospitalization was favourable.



Figure 1. (A) Plain abdominal radiograph showing foreign bodies in the stomach and colon. (B, C) Abdominal CT scan showing multiple radio-dense packages in the stomach and colon



Figure 2. (A, B) Seventy-one packages of cocaine removed after laparotomy

## DISCUSSION

Body-packing is the concealment of illegal substances in the human body, in anatomical cavities or body orifices<sup>[1,2]</sup>. The most transported substance is cocaine, followed by heroin, methamphetamines and cannabinoids. Typically, each person can carry around 1 kg of drugs, divided into 50–100 packages. Two types of complications are related to this practice: chemical, due to systemic absorption and consequent drug toxicity, and mechanical, such as intestinal occlusion<sup>[1]</sup>. Despite substance protection techniques, the risk of rupture is directly proportional to the number of packages carried<sup>[3]</sup>. Clinical suspicion followed by imaging<sup>[4]</sup> are essential for the diagnosis of this potentially fatal practice, which we believe to be increasing.

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