

# Case Report: Sudden Death of a Healthy Body Packer: A Case Study

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## ABSTRACT

**Background:** “Body packing” is concealing illegal substances in the digestive system for smuggling or transfer across borders and “body packers” are those who carry these substances. Illegal substances are wrapped in packages that are swallowed by body packers and delivered at destination by defecation. The most common fatal consequence of body packing is intoxication due to rupture of packages in the body. Due to secret nature of this form of smuggling, accurate statistics on its prevalence and complications are lacking. Iran is a big consumer of opioids, located in the route of transfer of illicit substances from Afghanistan to other parts of the world, and also implement tight restrictions on the carriage and distribution of opioids; thus rate of body packing is expected to be high in this country (especially for opioids). In this report we present a young man’s sudden death with unknown cause in central part of Iran that was referred for autopsy.

**Results:** In the autopsy, 2237 g of opioid was found in his gastrointestinal system in the form of wrapped packages of which three were ruptured and caused fatal acute intoxication. The victim had no criminal records, however, he had psychological problems and was in low socioeconomic position.

**Conclusion:** This report underlines the importance of primary prevention programs with focus on susceptible groups which are usually people from low socioeconomic groups and are unaware of health risks of body packing and take part in this trade for financial benefits.

## 1. Introduction

**B**ody packing refers to the intracorporeal concealment of illicit substances [1, 2]. “Body packers” usually swallow wrapped packages of illicit drugs for the purpose of smuggling [3, 4], however, they are at risk of fatal intoxication due to rupture of packages [1,

3, 5, 6]. Ingestion of packages can also cause physical obstruction, hemorrhage and perforation of gastrointestinal system which may lead to death in the absence of timely surgical interventions [5, 6]. Healthy body packers are often arrested on suspicion of police and referred to hospital for confirmation of the presence of packages in their bodies [7].

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The police usually have difficulty in detecting them without any complication but some behavioral clues will rise officers' suspicion especially at airports, national borders or prisons [6]. Plain abdominal radiography is the commonly accepted method for verification of these cases [4, 8], however by development of new methods of packaging, this modality is now less useful [2, 7, 9]. CT scan is more accurate for detection of packages but not all regional health centers has this equipment and its use as a screening tool is not accepted by many health professionals [4].

Many of complicated body packers -even admitted at hospitals- do not disclose the presence of drugs in their bodies and make management difficult and unsuccessful [10]. Thus, screening and management of body packers is a challenging issue and many of them may remain undetected and at high risk of fatal complications.

Smuggled drugs vary according to geographical regions; for example, opiates are more frequently seized in Iran while in many western countries cocaine is the main drug carried by body packers [4, 6-8]. Availability of illicit drugs, their affordability, and consumers' demands determine the main drugs of smuggling in any country and region [6]. Iran is one of the biggest consumers of the opiates in the world and is also located in the route of transportation of illegal drugs (especially opiates) produced in Afghanistan to other parts of the world [11]. Hence, illicit drug trafficking is a profitable trade in Iran and in response to the administration of strict regulation

on the distribution of opiates, rate of body packing as a secret mode of transfer is expected to be high [6].

This is a report of a sudden death in a young heavy body packer which was clarified after autopsy and have some important points for legislators and healthcare officials and professionals. About the ethical considerations it should be noted that the identity of victim was confidential.

## 2. Case Description

A 23-year-old man in a city in the west-central geographic area of Iran suddenly experienced respiratory distress and apnea. He died during showering at home. He was single, passed elementary school and unemployed. His family reported history of taking medications for psychiatric problems but he had no criminal records. As the cause of death was unknown, the corpse was sent to medicolegal organization for autopsy and determination of the cause of death, 12 hours after death. In external examination of the corpse there was no clue suggestive of the cause of death and only signs of lividity and rigor mortis were observed. His family denied forensic autopsy but because of unspecified cause of death, autopsy was permitted by order of jurisdiction. In autopsy exploration, lungs, brain and heart were normal. There was 500 mL of fluid in the peritoneal cavity and a lot of packages of opium were observed in the stomach and intestines (Figure 1).

Each package weighted about 10 g and totally 2237 g of opium were brought out from his gastrointestinal



Figure 1. Wrapped packages of opioid in the intestine of victim



**Figure 2.** Packages of opioid obtained from victim

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system (Figure 2). Three packages were perforated in the middle part of small intestine. Other visceral organs were normal. Morphine was positive in samples of liver and gastrointestinal tract. The cause of death was confirmed as opium poisoning.

### 3. Discussion

In the presence of tight control on distribution and carriage of illegal drugs such as opioids, smuggling will evolve as a trade and people with financial difficulties will take part in activities such as body packing of forbidden drugs [6, 8, 12]. Most body packers are men [6, 7, 13] but children [14], women [5] and even animals [9] have also been involved in this business. Unemployment and financial problems have been associated with increase in the rate of opioid smuggling in Iran [7, 15]. Body packers are usually with low level of educational attainment and are unaware of health threats of ingesting packets [6].

With the improvement of packaging methods, most body packers complete their mission successfully and would not be detected or harmed [7]. In addition, cause of death in many victims of body packing will remain undiagnosed until autopsy and may be reported as “sudden unknown death” [16]. Accurate statistics about different aspects of body packing are lacking due to secret nature of this business and just some reports and monographs are available. In a report from a poisoning referral hospital of Tehran during 2010-2014, the majority of admitted body packers were young males and with specialized diagnostic methods and care their mortality

have been 3% [12]. Legal medicine organization had reported 13 deaths among diagnosed body packers during 1998-2002 in Iran, of which 77% have been due to rupture of packages and consequent intoxication and 84% of victims were opioid carriers [17].

Risk factors for rupture of packages are low quality of packaging, greater the number and size of packets and longer duration of concealment of packets in the body [18]. Most mortalities of body packing are due to intoxication which is higher in Iran, compared to western countries and can be attributed to low quality of packaging [3, 6, 12, 17]. In the presented case, the total amount of opium carried by the victim was greater than other reports from Iran [6].

Considering the high availability of opioids, legal restrictions for their carriage and financial problems in Iran, many people are likely involved in body packing, especially those unaware of adverse effects. In such an environment, many cases of intoxication are probably under-the-counter body packers and physicians should be highly suspicious about such probability and also have enough knowledge about diagnosis and management of these cases [6]. As no guideline or protocol is available for the management of body packers, they pose a challenge for health care professionals [18].

Some health centers have prepared their own protocol for the management of suspected and confirmed body packers which can be effective in reducing mortality [13]. Given the prevalence of drug smuggling in Iran,

primary preventive programs are also of great value. The presented case shows the critical role of primary prevention programs which should be best implemented by targeted educational programs for susceptible groups such as youth from low socioeconomic status. Involvement of legislators in designing and implementation of such programs is mandatory and will warrant success.

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### Conflict of Interest

The authors declared no conflicts of interest.

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