Self-assessment corner

Acute abdominal pain in a young man

Haider M Al-Attia, Muna Al Murawy, Aysha Hareb, Omran B Gattee

A 25-year-old African man collapsed in the airport transit lounge while he was waiting to board the aircraft on his journey from an Asian country to his African home country. He developed severe abdominal pain that required his transfer to a nearby hospital as a possible case of acute pancreatitis. On arrival the abdomen appeared diffusely tender with a lower area of moderate guarding. Bowel sounds were normally audible. There were no scars seen externally, but there were sutures across the two sides of perineum, along with a few perineal ulcerations. The pupils were dilated. Multiple firm objects were felt on rectal examination. Some of these brown and sausage-shaped objects, were subsequently obtained by procto-sigmoidoscopy (figure 1). They measured 4 – 5 cm x 1.5 – 2 cm, and weighed 14 – 16 g each. Plain abdominal X-ray was taken on admission (figure 2).

Investigations including haemogram, electrolytes and urea, liver function test, serum amylase, Coomb’s test, VDRL and serologic tests for HIV, gave normal or negative results. Anti-HB, Core Ab, and HBs Ab were positive. Stool examination showed hookworm and Schistosoma mansoni ova.

Questions

1. What does the plain abdominal X-ray show?
2. What is the most probable diagnosis?
3. What are the indications for surgical intervention in this condition?
Answers

QUESTION 1
The X-ray confirms the presence of many objects along the anatomical distribution of the large bowel. They are of heterogenous appearance with a radio-opaque outer coat and radiolucent inner part.

QUESTION 2
Body packer syndrome.

QUESTION 3
Surgery is indicated if obstruction occurs or if the packages being passed per rectum show signs of breaking up. Operation should also be considered after resuscitating those who do not die following rupture of these packages.1-3

Management

The case was successfully managed with adequate fluid replacement and appropriate care of electrolytes along with repeated cleansing castile soap enemas at six-hourly intervals. Over a period of seven days, he passed a total of 113 heroin-containing packages per rectum. Their total weight was 1.750 kg. Food intake was allowed only when the last few packages appeared radiographically to be clustering in the sigmoido-rectal region. Both parasitic infestations were duly treated with anti-helminthic agents. On recovery, he was discharged to police custody. We were denied further information on the total heroin weight, and the analysis of the fabric of the coat of these parcels. The patient did not reveal any information on the way he had acquired these parcels or the nature of surgical procedures he had endured.

Discussion

The body packer syndrome refers to the ingestion of multiple packages containing drugs for the purpose of transporting contraband. Usually, the ‘body packers’ or ‘mules’ use constipating agents in an attempt to pass through customs undetected. At a later stage, the parcels are expelled and the contents recovered. The gastrointestinal tract has been the main vehicle of illicit drug transportation. Another site of concealment is the vagina. The process carries considerable health risk and complications (box 1) have led to a fatal outcome on many occasions. Nonetheless, with increasing experience of the organisers, the packing techniques have become more sophisticated and many survivors have now been reported.1-3

Previously, condoms, toy balloons or fingers of latex gloves were the fashion for packing, but they were highly susceptible to leakage or rupture and appeared either radiopaque or radiolucent on plain X-rays.1-5 More recently, packages made of layers of tubular latex with an additional layer of aluminium foil or cellophane have been used. These are more resistant to leakage or rupture. Those with an aluminium coating are not visible on plain X-ray,1 while most of the latter group appear radio-opaque. The common areas in which grouping of the parcels and gut obstruction occur are listed in box 2.

The ingenious ways of transporting illicit drugs are becoming a world-wide concern and the available pertinent medical literature from Europe, the US and Australia reflect the increasing awareness of the problem by medical personnel, particularly those with responsibility for nearby air or sea ports and prisons.1-5

The case presented here demonstrates that there are no international borders to the extent of the problem. Though it was somewhat difficult to explain the presence of all these parcels at a single point of time in the large bowel only, it appeared unlikely to us that he had ingested such a large number of packages without developing vomiting, gut obstruction or perforation. It was highly probable that surgical expertise had been sought, and the parcels had been introduced through the rectum under general anaesthesia. Obviously the purpose of the perineal sutures was to block the anal opening, hence delaying the urge of rectal evacuation. Moreover, the heterogeneous appearance of the parcels on X-ray film has not been reported previously.1-5

This case represents a new trend in corporeal transportation of contraband and this life like those of the other body packers, was regarded by the organiser(s) as entirely expendable.

Final diagnosis

A case of intracolonic heroin (body packer syndrome).

Keywords: body packer, heroin

<table>
<thead>
<tr>
<th>Complications of 'body packer syndrome'</th>
</tr>
</thead>
<tbody>
<tr>
<td>• rupture of parcels and leakage of drugs;</td>
</tr>
<tr>
<td>• death may occur from drug intoxication</td>
</tr>
<tr>
<td>• intestinal obstruction (6%)</td>
</tr>
<tr>
<td>• intestinal perforation</td>
</tr>
</tbody>
</table>

Box 1

<table>
<thead>
<tr>
<th>Common areas of blockage of packages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• gastric outlet</td>
</tr>
<tr>
<td>• distal ileum</td>
</tr>
<tr>
<td>• ileocecal valve</td>
</tr>
<tr>
<td>• hepatic and splenic flexures</td>
</tr>
</tbody>
</table>

Box 2
An unusual neurological problem in a patient admitted for acute myocardial infarction

AD Kelion, M Shahi, JA Bell

A 70-year old man was admitted with unstable angina, and five days later was thrombolysed with intravenous streptokinase for an acute anterolateral myocardial infarction. After another four days he developed a frontal headache and photophobia, followed a few hours later by a sudden onset of complete ophthalmoplegia of the left eye, a complete left ptosis, and a fixed and dilated left pupil. No visual field defect or loss of visual acuity was evident. Computed tomography (CT) of the brain was reported as being unremarkable, although the cavernous sinuses were not properly visualised. The cerebrospinal fluid was clear with a protein level of 0.73 g/l.

On day 12 of the admission he became drowsy, pyrexial, and mildly hypotensive. Blood tests, electrocardiogram, chest X-ray, and echocardiogram remained unchanged, and an abdominal ultrasound scan was unremarkable. Urine and several sets of blood cultures were sterile. Following one unit of colloid, he was kept gently hydrated with intravenous crystalloid. He was treated for presumed sepsis with broad-spectrum antibiotics, and acyclovir was administered to cover the possibility of a Herpes simplex encephalitis. Unfortunately his condition remained unchanged, and on day 17 of the admission he developed acute pulmonary oedema and died a few hours later on the intensive care unit.

Questions

1. What was the diagnosis?
2. How might the diagnosis have been confirmed?
3. What was the appropriate management?
Acute abdominal pain in a young man.

H. M. al-Attia, M. al Murawy, A. Hareb and O. B. Gattee

doi: 10.1136/pgmj.73.864.667

Updated information and services can be found at:
http://pmj.bmj.com/content/73/864/667.citation

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/