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Case report

Case report: Successful endoscopic removal of a large rectal foreign body

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Abstract

Incidence of emergency access due to retained large rectal foreign bodies is increased in the last years. Such situations are a challenge because often, due to their size and physical characteristics, the large foreign bodies of the rectum cannot be extracted manually or by endoscopy, thus requiring surgery, as reported in the literature. We report a case of a 59-old male with a retention of a large vegetable rectal foreign body (whole eggplant) successfully subjected to endoscopic removal without the need for surgery.

Introduction

Large rectal foreign bodies, mostly inserted transanally for sexual pourpouses [1], are usually hard to remove endoscopically, due to their size, shape and high stiffness. Furthermore, inside the proctosigmoid lumen they often lead to particular reactions that prevent their extraction, such as local oedema, antiperisthaltic waves, negative pressure and/or anal sphincter hypertonicity. Thus, large foreign bodies often require surgery to be completely extracted [2].

Case Presentation

A 59-old man presented with large vegetable foreig body (whole eggplant) transanally inserted during sexual activity.

At the clinical presentation he was in good condition: he was conscious and reported abdominal pain and distension. Body temperature was 36.3°C. Abdominal examination revealed moderate meteorism and a hard palpable mass in the right lower and hypogastric region, without clinical signs of peritonitis. Rectal digital exploration only allowed to touch the distal end of foreign body.

Biochemical findings were normal.

The abdomen X-rays showed a large radiolucent pear-shaped mass in the pelvic region (figure 1), no signs of perforation.

Patient was referred to lower endoscopy (Olympus GIF-Q165): rectal ampulla was completely occupied by the bottom and largest part of the eggplant (figure 2), with a very smooth and slippery surface that resulted not capable to be grasped by a snare or other decicated devices.

An incision of the distal surface was made by a diathermic pre-cut needle (Cook HPC-3 needle knife), that has been deepened for a few centimeters inside the pulp through Argon Plasma Coagulation

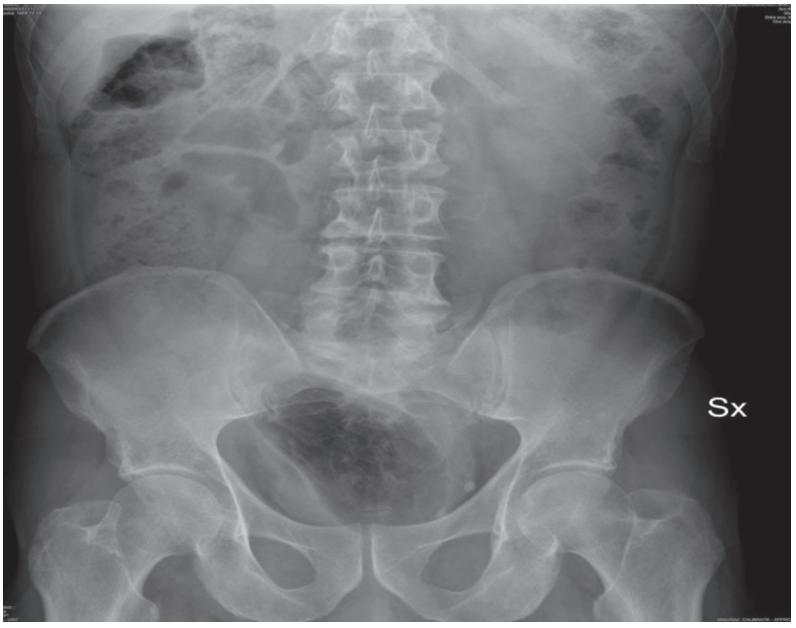

Figure 1. Abdomen X-Ray with large radiolucent mass in the pelvis.

Figure 2. Rectal lumen completely occupied by the eggplant bottom-end at the endoscopic visualization.

(Erbe APC-2). The route so obtained was subjected to pneumatic dilation, until a diamether of 20mm (Cook Hercules) (figure 3), so as to be cannulated by the scope.

Under endoscopic guidance and with the use of Argon Plasma Coagulation we completed the creation of a full-thickness path through the pulp of the eggplant, stopped once rached the rose sigmoid mucosa at the opposite side.

At last we removed the scope and repeated digital transanal exploration: the tip of the operator finger was allowed to firmly grab the bottom of the eggplant inside the path previously created and, through a gradual rotation, made the foreign body (that resulted to be almost 20 cm in lenght and 5cm in width, figure 4) to assume a position suitable for an easy manual extration, without any anal diversion.

Once the eggplant has been extracted proctosigmoidoscopy was repeated: rectal and sigmoid mucosa were normal without any sign of injury (figure 5).

Patient remained totally asympthomatic and was discharged after few hours.

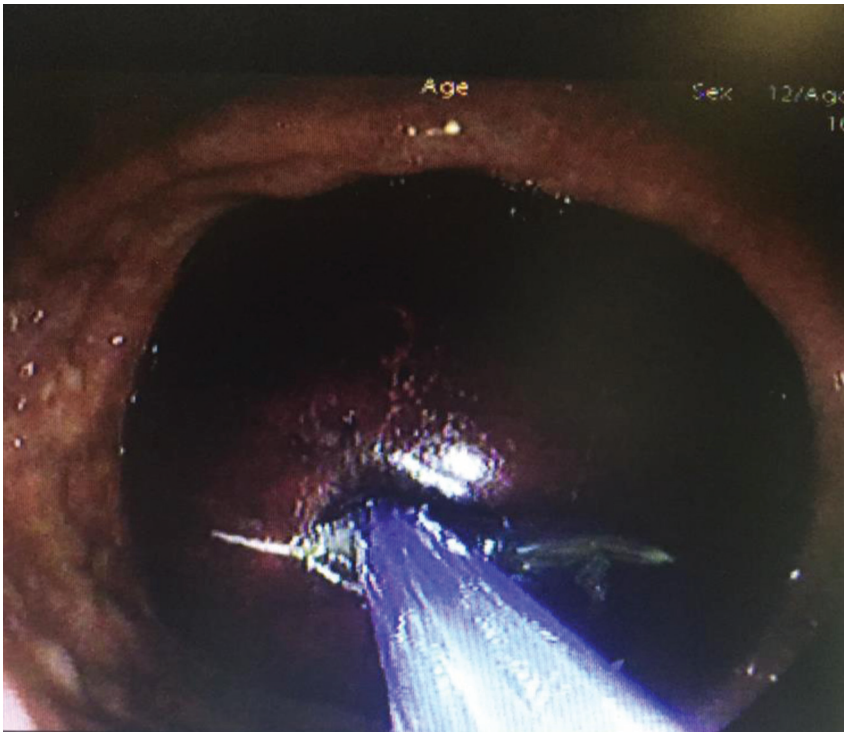

Figure 3. Balloon dilator inserted in the path previously created by pre-cut needle and Argon Plasma Coagulation

Figure 4. 20cm-lenght Foreign body (whole eggplant) once removed

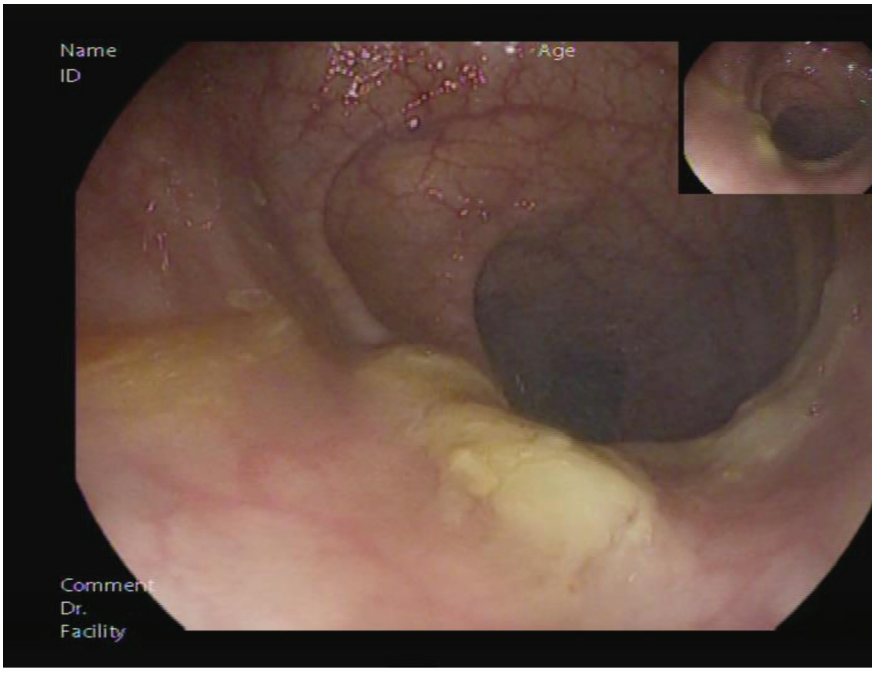

Figure 5. Healthy proctosigmoid mucosa at the endoscopic post-removal control

Discussion

The incidence of emergency accesses due to large rectal foreign body is increased in the last years, as reported in literature[2].

Large foreign bodies often require surgery because of their physical characteristics or due to complications (such as perforation or severe ischaemic damage of rectal wall) [3].

In literature we found only few cases of endoscopic successful removal of large foreign bodies without surgey [4-11] and in particular only one case relative to a rectal foreign body of eggplant, in witch, because of the favourable orientation with the smallest part (the calyx) in the distal rectum, endoscopic removal was easily made by a normal polypectomy snare [12].

On the contrary, in the situation presented above, we found the largest bottom part of the eggplant that entirely occupied the rectal lumen (as shown in the figure 2) and the removal was successfully obtained only through the use of multiple devices. Nevertheless, the clinical case discussed above demonstrates how even in the case of large foreign bodies, endoscopy can represent not only a fundamental diagnostic tool but, due to the operator experience and an adequate devices avaiability, can allow to a successful extraction through a minimally invasive procedure and avoiding the use of a traditional surgery.

Conflict of interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article

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