Accidental Introduction of Giant Foreign Body into the Rectum:

Case Report

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THERE are four circumstances under which foreign bodies are usually introduced into the anus: 1) diagnostic or therapeutic instrumentation, 2) self-administered treatment, 3) criminal assault and 4) autoeroticism.[1,2] An extremely unusual circumstance—purely accidental transanal introduction or penetration of a foreign body into the rectum—is described.

Case Report

This was the first University of Mississippi Medical Center admission of a 73-year-old white male farmer who entered with the chief complaint of "bottle in my rectum." The patient had lived most of his life in a rural community without indoor plumbing facilities. It was his practice for many years to frequent a nearby refuse and dumping area for the purpose of defecation. As he was an unusually obese man, weighing approximately 225 lbs., a squatting position was awkward. A stout branch or board, frequently placed over two boxes or tree stumps served as a support across the thighs. There did occur, however, on the particular instance to be described a break in the supporting wooden limb while the patient was in the act of defecation with his clothes and undergarments lowered. He fell rather heavily and directly over an empty glass bottle which was firmly embedded in the ground with its open end impacted in the earth. The bottle conformed roughly to the type commonly used to contain maraschino cherries and, in rough configuration, approximated that of a soda pop bottle. The patient fell directly upon the blunt bottom of this bottle which penetrated and lacerated the anal orifice in its passage into the rectum. He experienced excruciating pain and rolled heavily to one side. As he did so, the neck of the bottle snapped. The bottle was then completely contained in the lower rectum with the jagged edge facing the anal sphincter. The latter closed tightly after the bottle entered. A moderate amount of bleeding occurred and the patient was brought directly to the Emergency Room at the University of Mississippi Medical Center.

Past and family history both indicated an absence of perverted tendencies.

The patient was remarkably stoic and complained only during examination of the anal area.

Examination of the anus disclosed a 1-cm. laceration extending from the anus at 7:00 o'clock with the patient in the lithotomy position. The foreign body was completely contained within the anal orifice beyond the limits of visibility but was palpable.

Laboratory data was within normal limits. X-ray examination of the lower abdomen indicated that the foreign body was situated in the lower rectum with the base of the bottle cephalad and the broken neck with its jagged edges directed toward the anal sphincter (Fig. 1). Subarachnoid block anesthesia was induced. The anal sphincter was then dilated and attempts at simple extraction by means of the gloved finger or broad clamps was unsuccessful. Obstetric forceps were then used and, by this means, the bottle was removed intact. Renewed bleeding appeared from the rectal mucosa but was readily controlled with suture ligatures of chromic catgut.

The patient's postoperative course was uneventful.

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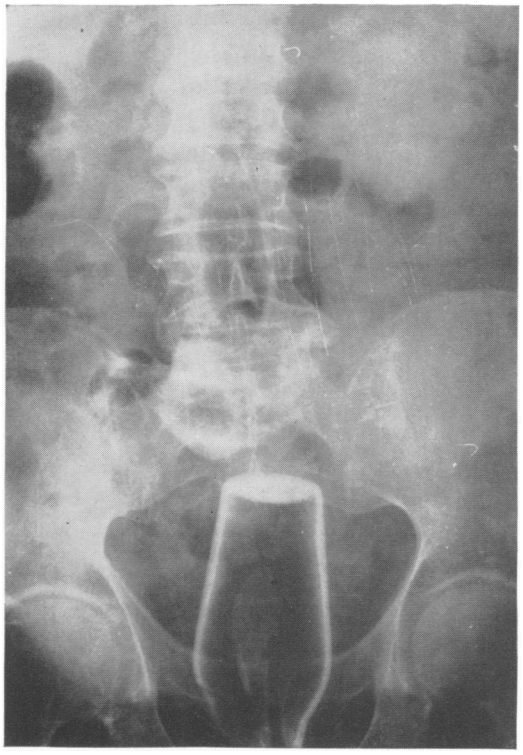

FIG. 1. Roentgenogram of abdomen showing foreign body (bottle) in rectum. The base of the bottle is directed cephalad. A fragment of glass lies within the bottle.

Discussion

Consideration of foreign bodies within the rectum that have gained admission through the anus includes an incredible list of objects and is usually associated with rather grim humor and sympathy as well as professional detachment. Repeated surveys of the literature have recorded many common as well as exotic objects which have been inserted through the anus. A partial list of these objects includes carrots, beer bottles, soda pop bottles, chili bottle, wooden rectal dilators, test tubes, rectal tubes, tea cup, tumbler, oil can, screw driver, syringe, file, candle, thread, coins, lock, saws, ink bottle, lemon, bananas,[12] thermometers,[11] whiskey glasses,[14] cucumbers,[3] onions,[2] flashlight,[2] electric light bulbs,[5] broom handle,[8] vaseline jar,[4] apple [3] and umbrella handle.[7] Among the more exotic objects have been spectacles, suitcase key, a half-filled tobacco pouch, a 6″ × 5″ box of tools weight 22 oz., a stone 17-cm. wide weighing about 2 lbs., and a frozen pig tail.[8] As curious as any of these is the report of Butters [1] in 1955, of a man who inserted a 6-in. tube of cartridge paper into his rectum and placed a lighted firecracker within the tube. The explosion created a perforation in the anterior rectal wall above the prostate.

Probably the most common and least reported of the four conditions under which foreign bodies are introduced into the anus is that of autoeroticism.[6, 13] The highest incidence occurs in homosexuals, lesbians and masochists. The case described is an example of what must be an extremely unusual accident and necessitates creation of a new category. The evidence that introduction of the foreign body in this case was by purely accidental means is based on several considerations. The patient gave no history of similar activity or any history of perversion. Of greater significance, however, was the method by which the bottle gained entrance into the rectum—that is, the blunt base was the penetrating end. Introduction of foreign bodies for perverse purposes is uniformly by the narrowest end as the leading point. It is to be remembered that it is the libido which is to be satisfied in these cases. The presence of a rectal laceration adds further proof in the case presented that introduction was purely accidental. It is doubtful that the excruciating pain accompanying such a penetration could be tolerated even in the most perverse of acts. The broken neck of the bottle tends to confirm the rest of the story. It would be highly unlikely that one could exert the necessary introductory pressure on the jagged edges of a bottle to effect anal penetration.

Diagnosis of rectal foreign bodies is usually made by history, digital examination of the rectum, sigmoidoscopy and roentgenography.[9]

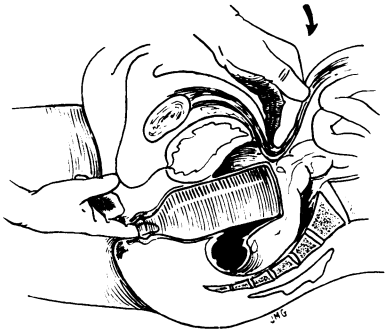

FIG. 2. Bimanual abdominal and rectal manipulation of foreign body.

Treatment of foreign bodies of the rectum and colon involves the removal of the foreign body. The majority of these foreign bodies may be removed through the anus, the smaller ones spontaneously or by finger extraction. Certain principles for removal of foreign bodies in the rectum by way of the anus have been evolved [12]: 1) Anesthesia should be used to obtain maximum anal sphincter dilatation. 2) Gentleness is required to prevent perforation of the rectum or colon. 3) Cathartics should not be used. 4) Bottles, tumblers, glasses, cups may have the open end directed cephalad, thereby producing a vacuum when an attempt is made to pull the foreign body through the anus. This vacuum may be abolished by threading a catheter through the anus to a point above the foreign body. 5) When manipulating the foreign body from below, great care must be exercised to prevent it from slipping to a higher, more cephalad level. If the foreign body is large, an assistant may hold it in place by pressure or by grasping it through the abdominal wall. 6) Every means for removing the foreign body by way of the anus must be exhausted before consideration is given to removal by laparotomy and colotomy, unless definite evidence of perforation exists. Violation of the unprepared colon involves considerable morbidity and possible mortality.

Many ingenious ways of handling glass foreign bodies in the rectum have been described when simple extraction fails. Among these are bimanual abdominal and rectal manipulation (Fig. 2); packing light bulbs in cotton before breaking them prior to

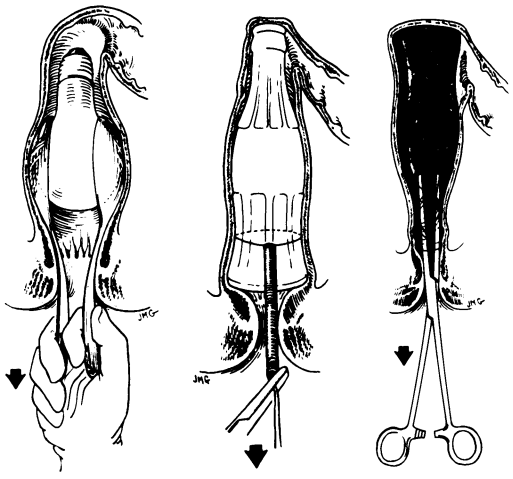

FIG. 3. Kitchen spoons used to grasp and extract fragile foreign body (light bulb).

FIG. 4. An improvised loop of nylon or silk held in place by a rubber collar and a clamp. The loop acts as snare for more efficient extraction of the foreign body.

FIG. 5. A large clamp is inserted and opened with a rectal foreign body the interior of which has been packed with moist plaster of paris. The plaster of paris hardens and the clamp acts as a traction handle for more effective purchase in extracting the foreign body.

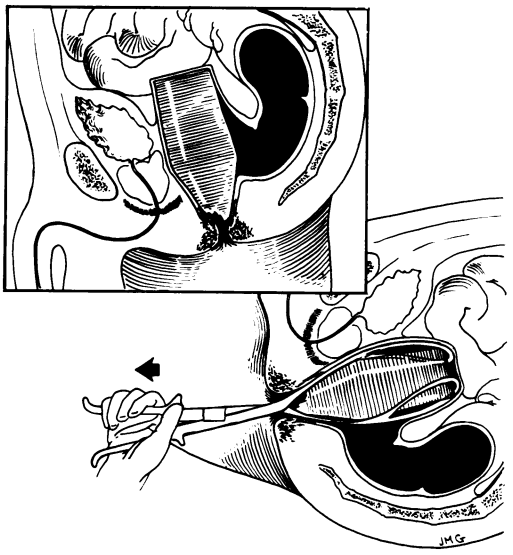

FIG. 6. Use of obstetrical forceps to remove large rectal foreign bodies. (Case described.)

their removal;[5] use of kitchen spoons as forceps to grasp the foreign body[19] (Fig. 3); use of a tonsil snare[2] or an improvised loop (Fig. 4); encasing a breakable foreign body in a plastic bag or wrapper and then fragmenting it with clamps or pliers; use of the obstetric forceps (Fig. 6). If the open end of the bottle is directed distally toward the anus, plaster of paris gauze can be wetted and inserted into the bottle while the gauze is moist. Then a large clamp can be inserted into the bottle and opened (Fig. 5). After the plaster of paris hardens, the clamp acts as a traction handle for effective purchase to extract the bottle.

If the foreign body has perforated the colon, the tear must be repaired surgically as soon as possible. Antibiotics in large doses are recommended. Oral feedings should be withheld until the patient passes flatus spontaneously. A proximal diverting colostomy may be indicated. During this time the patient should be maintained on parenteral fluids and supportive measures.

Summary

A case of giant glass foreign body in the rectum introduced through the anus is presented. It represents an unusual case in that anal penetration was entirely accidental being brought about by a series of improbable circumstances. Foreign bodies in the rectum and their treatment are discussed.

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