INTRODUCTION

Liposuction is one of the most common procedures performed in cosmetic surgery, second only to breast augmentation according to ASPS statistics. With the increased number of cases performed worldwide, the incidence of serious and rare complications following liposuction has been documented several times in the literature. These complications can be life-threatening and require immediate intervention. The authors report a case of bowel perforation following liposuction, which required extensive surgical intervention.

CASE PRESENTATION

A 41-year-old man presented for high-definition liposculpture. The patient had a BMI of 33 kg/m². The patient had a previous exploratory laparotomy 10 years ago following a gunshot wound to the abdomen. During the exploration, intestinal repair was done with colostomy. Later, the patient underwent closure of the colostomy and intestinal anastomosis with uneventful sequelae. The abdomen had a lower midline exploration scar and a postcolostomy closure scar (Fig. 1).

Liposuction was performed under local anesthesia with sedation using power-assisted liposuction: lipomatic device by Euromed. The patient was placed in 2 lateral positions followed by supine positions for completion of liposuction of the chest and abdomen. VTE prophylaxis included elastic stockings over the leg, adequate hydration, early ambulation, and chemoprophylaxis with enoxaparin (40 U SC, 4 hours after the procedure and for 4 days).

On the first postoperative day, the patient complained of abdominal distention, mild abdominal pain (that was falsely attributed to liposuction), anorexia, and no passage of flatus or stools. On auscultation, no intestinal sounds were audible (falsely attributed to ileus from pain/postoperative sequelae). The patient was instructed to become more ambulant and to drink plenty of fluids with laxative prescription.

On the second postoperative day, the fluid collected in the drains shifted in color from the regular red serosanguineous to green, denoting bile. Abdominal X-ray (erect) was obtained as well as abdominal CT scan (Fig. 2). Leakage was detected on abdominal CT and immediate exploration was done.

The exploration was done through the previous exploration scar (low midline laparotomy incision) and revealed a perforated jejunal intestinal loop. Resection of the perforated segment was done with an end-to-end anastomosis by Eurostitch. The patient was discharged on the second postoperative day with a normal abdomen and no signs of ileus or stool passage.

DISCUSSION

With the increasing number of cases performed worldwide, the incidence of bowel perforation following liposuction has been documented several times in the literature. Bowel perforation following liposuction has been documented several times in the literature. This is the first report of bowel perforation following liposuction in a patient with a history of abdominal surgery. The authors recommend that bowel perforation be suspected in patients who develop abdominal pain, distention, and ileus after liposuction, even in the absence of passage of flatus or stools.

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Summary: Complications with liposuction are not uncommon; some are very serious and can be life-threatening. In this case report, we present a case of bowel perforation following liposuction.

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Spreading Awareness: Bowel Perforation with Liposuction

Case Report
Here is our theory for perforation. The laparotomy closure was done using nonabsorbable sutures. With the strong ongoing suction forces during liposuction, the sutures broke with intestinal loops emerging through the abdominal wall defect. With continued liposuction, the cannula must have hit one of the herniated loops and caused the perforation.

Preoperative abdominal CT scan (although it was not done) was crucial to assess the integrity of the abdominal wall (in addition to the clinical assessment), presence of hernias, the condition of the bowel loops, and their relation to the abdominal wall. This could have prevented these sequelae. Additionally, the decision to operate on this patient, with such a troublesome abdomen, was not right.

During the abdominal liposuction, it is crucial to always feel the tip of the cannula during the infiltration and the suction process (with the surgeon’s nondominant hand). Areas of doubtful abdominal wall weakness or defects should not be treated. Another tip is to do the abdominal liposuction from above, cephalic side (ie, through nipple incisions). In this position, the cannula glides smoothly over the chest wall and the upper abdomen can be suctioned adequately. This will reduce the risk of abdominal perforation and additionally will reduce the risk of chest penetration, especially in patients with high, broad, and prominent chest wall. The operating table should be hyperextended during abdominal liposuction to minimize the risk of perforation.

Fig. 1. Preoperative photos for male patient, 41 years old with a BMI of 33. Note the lower abdominal scars from previous abdominal surgeries.

Fig. 2. A CT scan of the abdomen showing the leakage of the dye at the site of the perforation.
The perforation risk might be higher in patients with a higher BMI due to increased abdominal content and pressure. Furthermore, the use of PAL might increase the risk due to the cannula reciprocal and to/forth movements, i.e., it cannot be controlled by the surgeon. In contrast to manual liposuction, the cannula motion is wholly dependent on the surgeon and the risk of perforation would be, theoretically, less.

Although this event did not affect the patient’s results, the stress of the event is heartbreaking.

We believe that this complication is under-reported in the literature. The authors might not want their names linked to such serious complication. It is crucial that we have the initiative to report these complications in order to educate and spread knowledge.

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