

Case Report

Small Bowel Perforation as a Complication of Liposuction

Mohammad A Fouad , Ahmed Mossalam, Nael Al-Naqeeb
Department of Surgery, Al-Salam Hospital, Kuwait

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ABSTRACT

Small intestinal perforation can be a complication of liposuction, and it may present as extensive subcutaneous infection, especially if the injured bowel

loop is adherent to the anterior abdominal wall following previous laparotomies. Early diagnosis and treatment is mandatory to save the patient.

KEYWORDS: liposuction, small bowel perforation

INTRODUCTION

Liposuction is an aesthetic procedure that removes subcutaneous fatty tissue from the human body in an attempt to contour the body. Suction lipoplasty for abdominal contouring is a safe procedure. However, like any surgical procedure, it has some inherent risks. Cases of morbidity and mortalities were reported in the literatures due to aesthetic liposuction. The most commonly reported morbidity was thrombo-embolic complications; however peritonitis due to traumatic small bowel injuries iatrogenically caused by the liposuction cannula was also reported. Early diagnosis of the problem and aggressive management is the way to save the patient in such a drastic complication.

CASE REPORT

A 54-year old lady, not known to be diabetic or hypertensive but hepatitis C antibodies positive, came for contouring liposuction of the anterior abdominal wall. She had three previous laparotomies for disturbed ectopic pregnancy, abdominal hysterectomy and finally abdominoplasty with on-lay mesh repair of an epigastric hernia two years prior to this admission. The patient had a liposuction done by a general surgeon, who was an assistant in her previous abdominoplasty, using the tumescent technique. Through two ports, each located around one inch medial to the anterior superior iliac spine on both side, nine hundred milliliters of tumescent solution was injected and around one liter of fat had been suctioned. She stayed in hospital for 48 hours after liposuction and was clinically stable during that period. On the fifth post operative day, she was readmitted to hospital because of pain in the abdomen, fever and rigors. On examination, she was febrile (38.5 °C), tachycardic (PR 108 bpm) and abdominal examination revealed marked

superficial tenderness with signs of subcutaneous collection mainly in the hypogastric area. Laboratory investigations revealed leucocytic count of 14,000/ uL and a haemoglobin level of 107 g/L. Ultrasound examination of the abdomen revealed pockets of subcutaneous fluid collection. A provisional diagnosis of postoperative wound infection was made. Aspiration of the subcutaneous fluid collection was done and the sample was sent for gram staining with culture and sensitivity. Gram stain showed Enterococci. The subcutaneous space, when explored under general anesthesia through the scar of previous abdominoplasty, revealed a big amount of intestinal fluid and extensive inflammatory changes of the surrounding tissues together with an evidence of a perforation of a small bowel loop that was adherent to the mesh used during the previous abdominoplasty. Extensive necrectomy of the wound together with indwelling tubes for control of the intestinal fistula for a week was done to improve the septic condition of the patient. After a week patient had another laparotomy with resection of the injured bowel loop followed by end-to-end anastomosis. Staged closure of the wound was achieved using secondary sutures in four stages. Patient was discharged with a healed wound and in good general condition after a one-month stay in the hospital.

DISCUSSION

Liposuction for abdominal contouring in properly selected individuals is considered a safe procedure with a low incidence of local and systemic complications^[1]. Liposuction is a very popular plastic surgical procedure; however, like any surgical procedure it has some inherent risks^[2].

The mortality rate of liposuction was computed as one in every 5000 patients, with pulmonary

Address correspondence to:

Dr. Mohammad A. Fouad, Department of Surgery, Al-Salam Hospital, P.O. Box 11023, Al-Dasma 35151, Kuwait. Tel: 9532766, 9030326 (M) 9645656 (Dr. Mossalam) Al-Salam Hosp: 830003, 2533177, 8, 9, 2533254,2532352

thromboembolism as the major cause (around 25% of all mortalities)^[3]. The most commonly reported morbidities in the literature are; thromboembolic complications, excessive bleeding and anesthesia related complications^[4,5].

Necrotizing fasciitis was reported as a complication of liposuction by Heitman^[6], Mead^[7] and Barillo^[8]. It presents as pain out of proportion to clinical findings and requires early recognition, diagnosis and aggressive supportive therapy. However, necrotizing fasciitis still carries a mortality rate of 30-50%^[6].

Internal haemorrhage due to an aortic fissure induced by liposuction cannula was reported by Fogli^[9], and exsanguinating retroperitoneal hemorrhage by Talmud^[10]. Ischemic optic neuropathy was reported in one patient who had liposuction by Minagar^[11].

Seven cases of small intestinal perforation with diffuse peritonitis as a complication of liposuction were reported by Ovrebø^[1] and Talmor^[12], where multiple small bowel enterotomies were made by the liposuction cannula. Talmor^[12] reported a mortality rate of more than 50% in such cases. Ovrebø^[1] suggested that both, recent and former laparotomies, especially in the lower abdomen represent a possible risk of intestinal perforation when liposuction is performed. We are of opinion that this happened in our patient too due to adhesions of the small intestines to the thin abdominal wall.

CONCLUSION

Although liposuction is considered a safe plastic surgical procedure, it still has its own possible complications. Traumatic small bowel perforation can complicate the course of liposuction especially in patients who had previous laparotomies. The

patient may present with extensive subcutaneous infection due to gut organisms without signs of peritonitis. Early diagnosis and treatment is mandatory to save the patient.

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