

Background & Purpose

- Liposuction is the most common cosmetic procedure in the U.S., but it carries risks of serious complications.
- Complications from abdominal liposuction, like intraabdominal injuries, can be life-threatening and require prompt diagnosis for better outcomes.
- Reconstruction of the abdominal wall may be needed, ranging from primary repair for small defects to complex methods involving musculocutaneous flaps for larger defects.
- A unique case is presented involving bowel perforation from liposuction, leading to necrotizing fasciitis and complex reconstruction with anterolateral thigh flaps.
- The study raises awareness of liposuction complications and highlights the need for improved patient assessment and treatment strategies.

Case Presentation

- 51-year-old female with a BMI of 29.76 kg/m². Underwent gluteal fat grafting using abdominal fat
- Postoperative Day 6: admitted for altered mental status and lethargy, including jaundice.
- Notable for acute abdomen with purulent discharge. 5.
- CT showed partial small bowel obstruction, wall thickening, air bubbles suggesting bowel injury, extensive subcutaneous edema, and signs of necrotizing fasciitis.
- Necrotizing fasciitis of the abdominal wall and buttocks.
- Exploratory laparotomy revealed extensive necrotic tissue, significant debridement of the abdominal wall and muscle.
- Left with an open abdomen and negative pressure wound therapy.

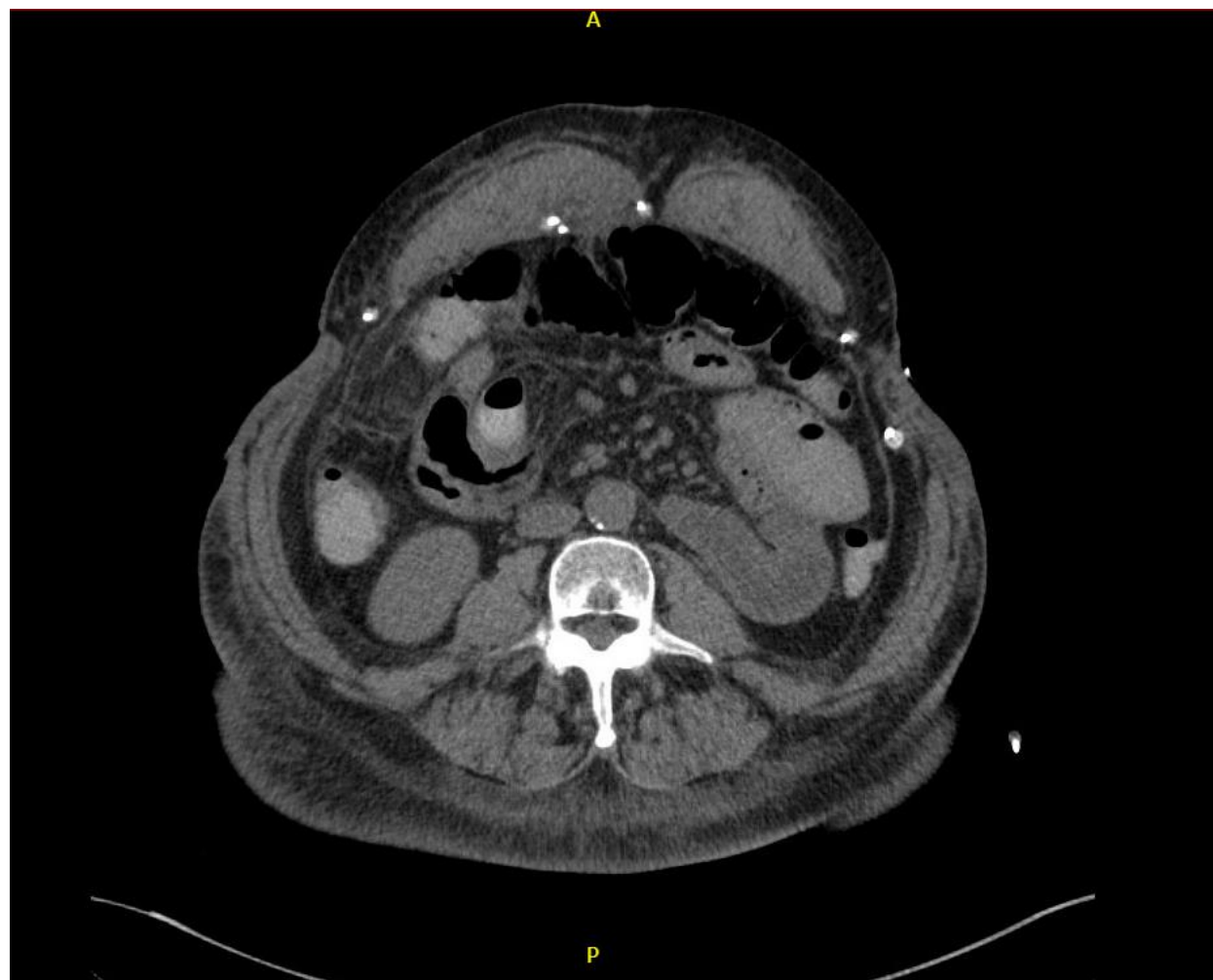


Case Presentation Cont.

- Seven months later, the patient sought help for abdominal protrusion, with significant loss of domain and accompanying gastrointestinal symptoms.
- Abdominal wall reconstruction proposed with Transverse Abdominis Release (TAR), mesh placement, and neurotized pedicled anterolateral thigh flap with vastus lateralis muscle.
- The flap was tunneled under the rectus femoris and sartorius to adequately cover the defect.
- Both flaps were inset and sutured to the surrounding fascial edges after confirming proper coverage.
- Delayed skin grafting was opted for at the donor sites to achieve better contour and aesthetic results.
- Significant improvement in ambulation noted post-recovery, particularly in sitting down and standing up.
- Gastroenterological complaints became nearly negligible after surgery.
- The patient discontinued the use of the abdominal binder, enhancing comfort.
- Overall quality of life improved following the surgical intervention.
- The patient has been regularly attending outpatient clinic follow-up appointments for over a year.



Before

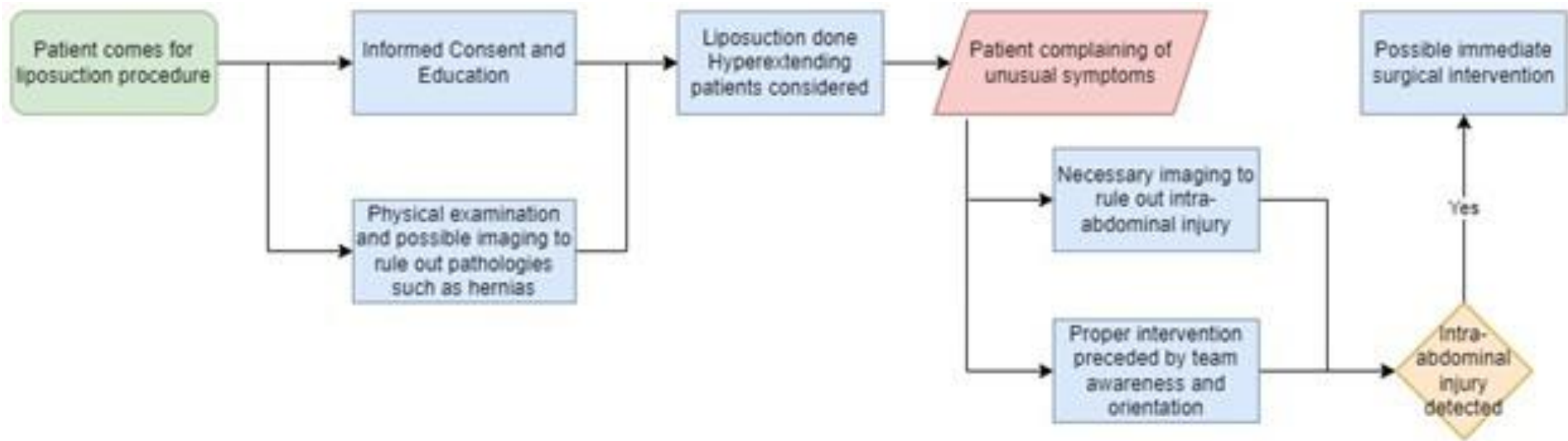


After

Literature Review

Reference	Age of patient	Type of Liposuction	Area of Liposuction	Presentation in hospital	Description of the injury	Incidence of Necrotizing Fasciitis	Reconstruction technique
CanCauda [1]	44	ultrasound-assisted liposuction-tumescent technique	Abdomen	After 4 weeks	Complicated by hematoma then developed cutaneous necrosis.	No	Debridement of the necrotic fat until they reached the muscles. Synthetic temporary dressing was applied until the infection was cleared, then a split-thickness skin graft was placed.
Deliere [2]	56	abdominal liposuction	Abdomen and flanks	After 24 hours	Intestinal Perforation followed by necrotizing fasciitis	Yes	Negative pressure large wound therapy dressing
Bekeny [3]	58	360-Degree Liposuction	Abdomen, flanks, and back	After 3 days	Bowel perforation with infection	No	ventral hernia repair with bridging mesh and abdominal closure. Skin closed primarily.
Singh [4]	65	Abdominal liposuction	Abdomen	After 7 days	cutaneous necrosis	No	skin grafting
Jafarian [5]	42	Liposuction	Abdomen	After 3 days	Liver injury with active bile leak	No	TAR with tummy mesh placement, negative pressure wound therapy, and split-thickness graft
Morgom [6]	35	Liposuction	abdomen, flanks, and arms	After 10 days	Necrotizing fasciitis	Yes	VAC dressing, split-thickness skin graft (STSG) application
Mole [7]	35	Liposuction + umbilical hernia repair	Abdomen, flanks, and thighs	Was not discharged. Symptoms rose POD 3.	Abdominal wall necrosis due to thrombosis	No	split skin grafts after debridement
Chiang [8]	60	liposuction	abdominal and bilateral thighs	After 6 days	Necrotizing fasciitis	Yes	hyperbaric oxygen and negative pressure wound therapy then meshed skin graft.
DiCandia [9]	52	liposuction	Abdomen	After 4 days	Bowel perforations with partial necrosis of the right rectus abdominis muscle	No	two failed split-thickness skin grafts; the wound was left to close by secondary intention. TAR
Gonzales [10]	29	liposuction	Torso and lower limbs	After 2 days	Necrotizing fasciitis	Yes	Skin grafting
Khalaf [11]	37	liposuction	abdomen	After 2 days	perforated viscous	No	VAC dressing, mesh, split-thickness skin graft (STSG) application

Patient Safety



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