# "Brazilian Butt Lift Gone BAD" Necrotizing Soft Tissue Infection After Gluteal Augmentation: Review Of Two Cases

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#### Citation

A Vijayasekaran, J H McClenathan. "Brazilian Butt Lift Gone BAD" Necrotizing Soft Tissue Infection After Gluteal Augmentation: Review Of Two Cases. The Internet Journal of Surgery. 2014 Volume 31 Number 1.

#### **Abstract**

Gluteal augmentation or the "Brazilian Butt Lift" is a surgical procedure used to improve the cosmetic appearance of the buttocks. Most references regarding this procedure emphasize its benefit but minimize the risk of the operation. In this manuscript, we report an experience treating two patients who experienced severe soft tissue infection following these operations.

#### **BACKGROUND**

Liposuction is currently the most popular body contouring technique. Aesthetic gluteal augmentation by lipo-injection is an increasingly popular method of gluteal augmentation. The surgical procedure encompasses liposuction of the hips, thighs and abdomen followed by injection of autologous fat intramuscularly as well as in the subcutaneous plane. This method of gluteal augmentation is believed to have several advantages over silicone implants as 1) it is believed to be a less invasive procedure 2) enables a large volume augmentation and 3) eliminates the danger of implant rupture. It also has the theoretical advantage of reducing fat in other parts of the body. However, we report two cases of severe necrotizing soft tissue infection after gluteal augmentation with lipo-injection.

#### **METHODS**

We report two patients who underwent lipo-assisted gluteal augmentation who presented with severe necrotizing soft tissue infection.

### **RESULTS**

The first patient was a 23-year-old woman who underwent gluteal augmentation in Mexico. Seven days after her augmentation procedure, she presented to our hospital with severe dehydration, fever and a picture of sepsis. Her temperature was 39.4°C. Blood pressure was 90/53 mmHg and pulse was 120. When an MRI scan (Figure 1) demonstrated a nearly 6cm abscess in the left gluteal region,

a surgical consultation was requested. After resuscitation and initiation of antibiotic therapy, she underwent extensive incision, drainage and debridement of the gluteal region. Foul smelling fluid was drained. Wound cultures were positive for Bacteroides and Candida. She returned to the operating room several more times for dressing changes and further debridement. She was also treated with appropriate antimicrobial therapy and aggressive local wound care and she was discharged after two weeks. Her wound healed secondarily.

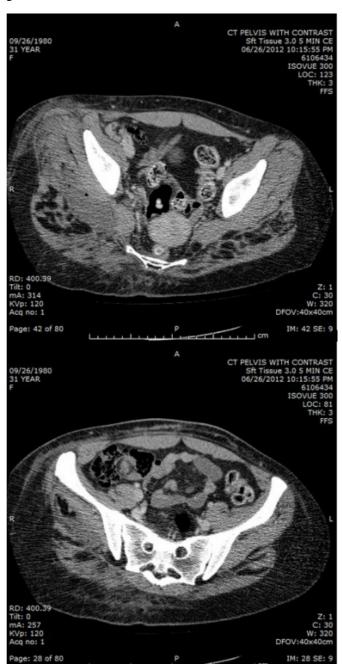
**Figure 1**MRI showing an almost 6cm abscess of the left gluteal region.



The second patient was a 31-year-old woman who presented one week after a "Brazilian Butt lift" in Mexico with fever to 40.4°C, hypotension and white cell count of 45,000. CT scan on presentation was consistent with extensive fluid and air densities within the right gluteus muscles suggestive of fasciitis. Surgical exploration was consistent with necrotizing soft-tissue infection with an abscess cavity tracking from the posterior aspect of the right gluteus muscle to the medial part of the right thigh. The patient required admission to the ICU for continued resuscitation and antibiotic therapy. Wound cultures were positive for Enterococcus. This raised concern for a rectal injury, but CT (Figure 2) of the abdomen/pelvis with rectal contrast did not reveal a rectal injury. She underwent multiple surgical debridements and dressing changes during her hospitalization. She was eventually discharged on hospital day 30 and her wound healed secondarily.

## Figure 2

CT scan demonstrating multiple deposits of fat within the gluteus muscles of both buttocks. Also demonstrated is an extensive gas-containing abscess deep within the right gluteus muscle.



### **DISCUSSION**

Aesthetic surgeons increasingly use techniques of liposuction, lipo-sculpting and lipo-augmentation to improve body image and appearance. The technique of injection of autologous fat has been used to augment tissues as disparate as the face, chin and buttock. When used to augment the buttock, most articles in the literature emphasize improved

appearance by showing before and after images. Little attention is paid to the risks of surgery including infection. According to Harrison, "the well-rounded buttocks are highly prized as a secondary sexual characteristic."1 Aesthetic surgeons have endeavored to improve the appearance of the buttock region for more than forty years. Techniques have included placement of smooth implants, injections of silicone or other materials, and more recently liposuction combined with lipoinjection.

Ali described various techniques of enhancement and augmentation of the gluteal region.2 In his review of forty patients treated by liposuction and lipoinjection, patient satisfaction was achieved in 90% of patients. No major complications or infections were reported. Harrison also discussed surgical techniques for gluteal augmentation.1 Major complications of these operations include implant rupture and extravasation, displacement, capsule formation, hematoma and seroma. Cardenas-Camarena presented results in 66 patients treated by liposuction and lipoinjection. There were no infectious complications reported.3

In a discussion of wound complications following gluteal augmentation surgery, forty patients were reviewed by Serra. Seroma and hematoma were most common. Wound infection was mentioned in only one patient and there was no discussion of management of the infection.4

The cost of surgical procedures to augment the cosmetic appearance of the buttock region is advertised from \$7,500 to \$15,000. With rare exceptions, the cost of these procedures is not covered by insurance plans. These procedures are also performed in other parts of the world and both of our patients found that the cost of the surgical procedure was about 70% less if they traveled outside the

Unites States to have the procedure done. Standards of surgical care may be different there.

In this communication, we report two patients who had gluteal augmentation surgery (Brazilian Butt Lift) and who later developed severe and deep-seated soft tissue infection. We emphasize the need for early and aggressive drainage and debridement of infected tissue and point out that in addition to antibiotic therapy, multiple surgical debridements may be necessary. One of the reasons for the need for multiple procedures may be the fact that devascularized fat is injected in many different directions to augment the buttock.

Bacterial flora in our two patients grew
Enterococcus, Bacteroides and yeast. Aesthetic surgeons
should be aware that serious and deep-seated infections may
occur after "Brazilian Butt Lift" surgery. Their informed
consent should counsel patients that serious infection may
happen. Surgeons who treat patients with deep-seated
infection after gluteal augmentation should be aware that
antibiotics should be of broad coverage and that frequent
return to the operating room might be necessary to debride
devitalized tissue.

#### References

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