



H120 Dying to Be Beautiful: Fatal Fat Emboli After Liposuction and Brazilian Butt Lift Procedure

Farshaad Bilimoria, MD, 10 Allegheny Center, Apt 224, Pittsburgh, PA 15212; Stacey L. Reed, DO, 9500 Babcock Boulevard, Apt 54, Allison Park, PA 15101; Todd M. Luckasevic, DO, Allegheny County ME, 1520 Penn Avenue, Pittsburgh, PA 15222; and Karl E. Williams, MD, Allegheny County OME, 1520 Penn Avenue, Pittsburgh, PA 15222*

The goal of this presentation is to illustrate a rare and fatal outcome of cosmetic surgery in a patient with no immediate post-operative complications.

This presentation will impact the forensic science community by demonstrating the sudden death of an otherwise healthy individual following an elective surgical procedure of growing popularity.

Introduction: Cosmetic surgical procedures are on the rise in the United States. In 2015, 15.9 million procedures were performed, including an increased number of buttock augmentations with fat grafting. These procedures are generally considered safe, but, as with any surgery, patients remain at risk for possible adverse effects from bleeding and infection to serious cardiopulmonary complications. While more commonly seen in orthopedic surgeries or trauma, pulmonary fat emboli have been documented in cosmetic procedures.

Materials and Methods: This case involves a 31-year-old Asian female found unresponsive in her hotel room. She had traveled from out of town to undergo an outpatient Brazilian butt lift procedure (abdominal liposuction with fat redistribution to the buttocks), and was recovering in a hotel room. The procedure had gone well, and an exam on post-operative day one revealed no issues. When the decedent failed to arrive at her appointment on post-operative day two and could not be reached via phone, the surgeon initiated a welfare check. A hotel employee found her lying on the bed, fully clothed. Emergency medical services were called, but the decedent was pronounced dead on arrival. An investigation of the room revealed various medications, including diazepam and oxycodone. There was no evidence of a struggle.

Results: External exam revealed multiple 0.25 inch - 0.5 inch surgical incisions on the abdomen, back, buttocks, anterior inguinal region, and right dorsal hand. Yellow-tinged froth was present in and around the nose. Tardieu spots were identified on the lateral right chest. Examination of the deep and subcutaneous fat of the back and abdomen revealed areas of hemorrhage. All organs were grossly unremarkable, but microscopic examination of the lungs demonstrated diffuse, bilateral fat emboli throughout the lung vasculature. Postmortem toxicology demonstrated low levels of her prescribed ketamine and oxycodone in the blood.

Conclusions: Elective cosmetic surgeries are common, but not without risk. Surgical complications can range from minor to fatal. Distortion of tissue boundaries can lead to fat globules entering the vasculature, resulting in fatal emboli. With the increase in popularity of fat redistribution procedures, the safety of these practices must be reviewed in order to prevent unnecessary loss of life.

Brazilian Butt Lift, Fat Redistribution, Fat Emboli