

# BBL Mortality in South Florida: An Update From Ground Zero

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Aesthetic Surgery Journal  
2023, Vol 43(3) 223–224  
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Oxford University Press on behalf of The  
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<https://doi.org/10.1093/asj/sjac325>  
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Editorial Decision date: November 8, 2022; online publish-ahead-of-print December 7, 2022.

We are grateful to Dr Mofid for his thoughtful and relevant commentary<sup>1</sup> on “Brazilian Butt Lift–Associated Mortality: The South Florida Experience.”<sup>2</sup> Dr Mofid quotes a highly experienced Brazilian butt lift (BBL) surgeon, regarding the use of both hands for proprioceptive awareness during fat harvest and injection. It is true that we have all been trained to use liposuction and fat injection cannulas in a blind fashion, and that this is still the preferred technique for liposuction and fat harvest. However, the significant mortality that we have documented in our community emphasizes that performing gluteal fat grafting by a technique that relies only on tactile feedback is unpredictable and unnecessarily dangerous for patients and their surgeons.

The 2019 Florida Board of Medicine Office Surgery Rule mandated that all gluteal fat grafting be restricted to the subcutaneous space.<sup>3</sup> Unfortunately, the only thing that has changed in South Florida since the ruling are the operative notes. BBL-associated pulmonary fat emboli mortality has actually increased since 2019! Every surgeon involved in these deaths declared that they only injected subcutaneously; however, the autopsy findings documented otherwise. It is now clear that the tactile feedback that the surgeon receives from the hand on the buttock skin does not provide accurate perception of the depth of the injection cannula. Tactile proprioception by itself is not sufficient to protect the surgeon and their patient.

Although ultrasound-assisted BBL addresses the “blind” nature of the procedure, it does require learning new proprioception through the fingers of the hand holding the ultrasound probe on the skin. However, this is something that is relatively quick and easy to master by trained,

board-certified plastic surgeons. All major plastic surgery societies should offer courses on ultrasound-assisted gluteal fat grafting to help develop this skill set. Furthermore, syringe injection may not be the most accurate fat injection technique for ultrasound-assisted BBL. Power-assisted injection cannulas connected to a peristaltic pump allow easy control of fat injection with a single hand and result in precise and efficient dispersion of the fat grafts.<sup>4</sup>

Because of the alarming increase in mortality since 2019, the Florida Board of Medicine passed an emergency rule in 2022 mandating that surgeons create a continuous time-stamped and dated ultrasound video of the fat injection procedure and save this video in the patient’s medical records.<sup>5</sup> This video can protect the surgeon, should medico-legal issues arise, by providing tangible evidence that fat grafting was solely performed within the subcutaneous spaces. The Florida Board of Medicine also mandated that only the consenting surgeon should perform the critical portions of the operation, defined as the liposuction and the fat injection. These duties cannot be delegated to nonphysicians, as has been reported to be a commonplace practice in South Florida budget clinics.<sup>6</sup> A time-stamped and dated ultrasound video can protect patients

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by limiting this delegation, as the consenting surgeon cannot physically inject different buttocks or different patients simultaneously. The effect of these 2022 Board of Medicine Rules has elevated the standard of care in Florida, as surgeons are now using ultrasound to document that all fat grafting is performed within the subcutaneous space.

Finally, the authors agree that legislative changes in Florida are in order. Adopting guidelines similar to those in California and Texas, which prohibit nonphysicians from owning medical practices, could prioritize patient safety and curb the high-volume, budget clinics currently responsible for over 90% of the BBL-associated pulmonary fat emboli deaths in our community. Unfortunately, this takes time, and we as a specialty can ill afford to continue with the status quo. Again, the authors wish to express their gratitude to Dr Mofid for his contributions to the Gluteal Fat Grafting Task Force and for his relentless commitment to improving patient safety as it relates to this procedure.

### Disclosures

Dr Garcia is a consultant to Mentor Corp. (Irvine, CA), Solta Medical (Hayward, CA), Bard (Murray Hill, NJ), BD (Franklin Lakes, NJ), and MTF (Edison, NJ). Dr Pazmiño is a consultant to Clarius Mobile Health (Vancouver, Canada). Both authors serve as consultants to the Aesthetic Surgery Education and Research Foundation (ASERF) Gluteal Fat Grafting Task Force.

### Funding

The authors received no financial support for the research, authorship, and publication of this article.

### REFERENCES

1. Mofid MM. Commentary on: Brazilian butt lift–associated mortality: the South Florida experience. *Aesthet Surg J*. 2022:sjac250. doi: [10.1093/asj/sjac250](https://doi.org/10.1093/asj/sjac250). [Epub ahead of print]
2. Pazmiño P, Garcia O. Brazilian butt lift–associated mortality: the South Florida experience. *Aesthet Surg J*. 2022:sjac224. doi: [10.1093/asj/sjac224](https://doi.org/10.1093/asj/sjac224). [Epub ahead of print]
3. Florida Board of Medicine. Accessed July 9, 2022. [https://www.flrules.org/Gateway/View\\_notice.asp?id=22065771](https://www.flrules.org/Gateway/View_notice.asp?id=22065771)
4. Pazmiño P. ultraBBL: Brazilian butt lift using real-time intraoperative ultrasound guidance. In: Garcia O Jr. ed. *Ultrasound-Assisted Liposuction*. Springer; 2020:147-172.
5. Florida Board of Medicine. 64B8-9.009: standard of care for office surgery—Florida administrative rules, law, code, register—FAC, FAR, eRulemaking. Florida administrative code & Florida administrative register. Accessed October 8, 2022. <https://www.flrules.org/gateway/ruleno.asp?id=64B89.009>
6. van Zeller M. Trafficked with Mariana van Zeller: black market surgery. *National Geographic*. Accessed July 9, 2022. <https://www.nationalgeographic.com/tv/shows/trafficked-with-mariana-van-zeller/episode-guide/season-02/episode-01-black-market-surgery/vdka25475912>