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# Movie script or horror book: causes and consequences of cosmetic medical tourism

Libreto de película o libro de terror: causas y consecuencias del turismo médico estético

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When opening the medical news section in the non-specialized press, anyone can spot new cases that could well resemble a script out of horror movies or books: healthy or physically fit women (ASA I-II), generally of post reproductive age, in the hope of improving and rejuvenating their appearance, frequently undergo plastic surgery procedures. Unfortunately, in some cases, the outcome sometimes turns fatal. (1-3)

There are frequent reports of severe adverse events, perioperative cardiorespiratory arrest, when undergoing combined plastic surgery procedures, commonly called "combos". (4,5) These usually involve interventions such as liposuction combined with abdominoplasty, breast surgery and fat grafting for buttock augmentation, better known as Brazilian butt lift (BBL). (6,7) The causes are generally unknown, but in the corridors and spontaneous medical talks, these are usually attributed to deep venous thrombosis and pulmonary thromboembolism, as well as to microscopic and macroscopic fat embolism syndrome (FES) during the surgical procedure. (8,9)

Probable surgical causes or contributions are minimized. Questions such as whether the surgery was performed by a specialized and qualified surgeon, place where the surgery was performed, medical-surgical center or hospital. How much blood loss did the patient experience, the surgical time, whether the patient's position was changed or not (prone to supine, or vice versa), what was the amount of fat supernatant extracted in case of liposuction, was there a suspicion of hypovolemia, what was the fat reinjection technique, are all valid questions and worth exploring.

From the perspective of perioperative anesthetic management, there are other factors that should be discussed; in view of this repetitive and worrisome pattern, I do believe that it is necessary

and mandatory to clarify whether there are factors that can be improved and require immediate attention.

- **1.** Are these patients appropriately selected, optimized and anesthetically assessed prior to plastic surgery procedures?
- **2.** With regards to anesthesia techniques, are there any commonalities among the cases with adverse outcomes?
  - 2.1 General vs. regional.
- 2.2 In the case of general anesthesia, inhaled vs. intravenous.
- 2.3 In case of regional anesthesia, spinal vs. epidural or even peripheral blocks?
  - 2.3.1 Combined techniques such as epidural and spinal (CSE).
  - 2.3.2 High neuraxial blocks?
- **3.** Is there adequate intraoperative and immediate postoperative monitoring?
- **4.** In case of spontaneous ventilation, what type and level of sedation is used?
- **5.** In view of potential local anesthetic systemic toxicity (LAST), are there lipid solutions available to immediately address any adverse reactions to local anesthetic agents? (10)
- 6. Is dantrolene available in case of malignant hyperthermia? (11)
- **7.** In case of emergencies, what is the contingency plan and the proximity-linkage to specialized care hospitals for immediate transfer?

These are some of the questions that initially come to my mind as a physician specialized in perioperative medicine, concerned about peri-anesthesia safety. In my opinion, these questions must be carefully explored and analyzed. In the event that patterns or deficiencies are identified with respect to the international standards and guidelines established and recommended by the WHO and the ASA, they should be corrected promptly to ensure the best possible perioperative outcome. (12-17)

This group of patients have a low risk of perioperative mortality and hence, this situation should be a priority for the organizations responsible for perioperative management and for the quality and accreditation agencies. The Colombian Society of Anesthesiology and Resuscitation (S.C.A.R.E.) is internationally recognized for its commitment to medical quality and patient safety during the perioperative period and its influence at the national level and in the regulatory setting on this matter shall be more than welcome.

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