



## Pathology & Biology Section – 2008

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### **G29 Massive Fat Pulmonary Embolization Secondary to a Liposuction Procedure With Tumescent Technique Diagnosed Postmortem in an Embalmed and Buried Body**

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After attending this presentation, attendees will understand that all deaths occurred during whatever medical surgical procedure where death is not expected should undergo a medico-legal autopsy and how to avoid problems and complications produced by previously embalmed and buried bodies with marked external and internal postmortem changes that obscure the true cause and manner of death. Attendees will additionally understand that, though an autopsy initially was not performed, a thorough, methodical postmortem investigation may be able to find the true cause and manner of death in many cases.

This presentation will impact the forensic community by serving as a methodical parameter in the evaluation and investigation of cases where the deceased was previously embalmed and buried without an autopsy initially being performed.

A case of massive fat pulmonary embolization diagnosed 80 days post-mortem in a previously embalmed and buried body of a 32-year-old woman who underwent an elective liposuction plastic surgery with tumescent technique is presented. The patient received a pre-surgical medical and laboratory evaluation by a cardiologist who considered that the patient was healthy enough for the elective surgery. General anesthesia was administered and the liposuction procedure was performed without complications; however, at the end of the surgery the patient developed sudden cardiac arrest. Cardiopulmonary resuscitative measures were done with no response; simple chest x-rays were performed and showed suggestive changes of a thromboembolic pulmonary process. The patient was declared dead and the surgeon erroneously signed the death certificate with the cause of death as a cardio-respiratory arrest. The body was embalmed with formaldehyde and buried the next day with no performance of an autopsy. The plastic surgeon was sued for medical malpractice and the body was exhumed and autopsied 80 days later as evidence. In spite of the deceased being embalmed and buried previously with marked external and internal postmortem changes, the macro micro pathological findings correlated well with clinical symptoms, radiological changes, and toxicological studies and revealed that the cause of death was a massive pulmonary fat embolization, an inherent risk of the surgical procedure.

**Pulmonary Fat Embolism, Fat Embolism, Liposuction**