

## FAT EMBOLISM AND THROMBOEMBOLISM : ICEBERG PHENOMENON IN LONG BONE FRACTURES?

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**Introduction:** In 1989, Bone et al., reported stabilisation of long bone fractures within 24 hours decreased pulmonary complications. Nevertheless we reported 3 cases with pulmonary complications post early fixation of long bone fractures within a year. All 3 patients presented with respiratory distress post fracture fixation with low oxygen saturation on blood gas analysis.

**Discussion:** A 22 years old lady(Figure 1) sustained a closed distal third femur with an open proximal tibia fracture following a road traffic accident. She underwent plating of the femur. However, postoperative, she developed shortness of breath with persistent tachycardia. CTPA showed left upper segmental branches pulmonary thrombosis. She was treated for Pulmonary Embolism and started on anticoagulant. A 16 years old boy(Figure 2) involved in a motorvehicle accident where he sustained a close right midshaft femur fracture. He underwent a plating of the right femur. On day one post-operation, he complained difficulty of breathing. Urgent CTPA done showed small right segmental descending pulmonary artery embolism and he was started on anticoagulant. A 20 years old guy(Figure 3), had open comminuted fracture of the left tibia. However, post debridement and external fixation of the left tibia, the patient has persistent tachycardia. He fulfill Gurd Criteria with 1 major , 4 minors with evidence of bilateral lungs infiltrates, geographical ground-glass opacities, with associated septal thickening and mosaic attenuation from his CTPA. The patient treated as possible fat embolism syndrome post-surgical intervention.

**Conclusion:** FES and PE post fracture fixations is rare however still reported. Early accurate diagnosis of pulmonary complications is important because of their different treatment requirement. CTPA is an excellent modalities to diagnosed both of this post operative lung complications