

CONCOMITANT FAT EMBOLISM SYNDROME AND PULMONARY EMBOLISM IN IPSILATERAL FRACTURES OF THE FEMORAL AND TIBIAL DIAPHYSES: A CASE REPORT

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Introduction: Simultaneous ipsilateral femoral and tibial fractures cause a floating knee. Treatment of such patients is complicated by many factors including fat embolism syndrome. This case report describes a case of concomitant fat embolism syndrome and pulmonary embolism in a floating knee patient causing challenges in the treatment.

Discussion: A 19 years old man presented with alleged motor vehicle accident, sustained closed fracture midshaft left femur and tibia with open fracture left patella. Twelve hours post trauma, patient developed desaturation and persistent tachycardia, thus proceeded with urgent intramedullary nail fixation for left femur and tibia fractures. Post operatively, patient still have persistent tachycardia despite other causes were already ruled out. Concerns about pulmonary embolism, a computed tomography (CT) scan of the thorax with intravenous contrast was obtained showed small scattered central filling defects within the segmental branches of left descending pulmonary artery suggestive for pulmonary embolism. In addition, there was also ground glass opacities seen at lateral segment of right middle lobe represents pulmonary fat embolism as correlated with history of trauma. Patient was on oxygen dependent for a week then repeated CT pulmonary angiography revealed worsening ground glass densities in both lungs. Supportive treatment with oxygen was continued, anti-coagulant drugs was administered and aggressive chest physiotherapy was done. Patient's condition totally improved following the treatments.

Conclusion: Treatment of floating knee's patient with concomitant fat embolism syndrome and pulmonary embolism is such a challenge as the reaming in the same time for femoral and tibial diaphysis increased this kind of complications.