

Dr, I Can't Breathe after You Fix Me

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INTRODUCTION:

Fat embolism syndrome (FES) is a rare medical condition that occur when fat globules enter the bloodstream and cause an inflammatory response. This condition is often associated with acute long bone fractures or intramedullary instrumentation, where the contents of the bone marrow are released into the circulation during the surgical manipulation of bones or insertion of intramedullary devices. While FES is relatively rare, its occurrence is more commonly associated with trauma, especially fractures of long bones¹. However, it can also develop in the post-operative period, particularly after orthopedic surgeries.

CASE REPORT:

A healthy 17 year-old boy involved in motor vehicle accident and sustained closed right midshaft femur fracture where intramedullary device was done at day 2 post trauma with closed reduction and minimal blood lost. Patient's vital signs remained stable throughout the case with an oxygen saturation of 99–100% and was discharged well to ward. Post operative 2 hours, patient developed shortness of breath with oxygen saturation decreased down to 83-88% under nasal cannula. Patient did not have other signs suggestive of FES. Post operative hemoglobin was normal. Urgent CT Pulmonary Angiogram showed no evidence of pulmonary embolism. Lung findings suggest fat embolism. Patient was started on fluid resuscitation and given a higher oxygen supply. The patient's condition is improving with fluid resuscitation and oxygen therapy. He was able to wean off oxygen and was discharged home 5 days later, fully awake without any complications, to be followed in orthopedic outpatient department.

CONCLUSION:

It is important to note that FES can occur in any situations, even in post-operative patients. The positive outcome described in this case is

encouraging and highlights the effectiveness of timely intervention and supportive care in FES.

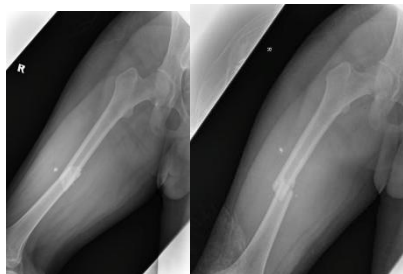


Figure 1: Pre-operative X-ray



Figure 2: Post-operative X-ray after fixation



Figure 3: CTPA showed evidence of fat embolism

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