Respiratory Complications After Early Stabilization Of Tibial Shaft Fracture, A Case Report

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INTRODUCTION:
Every long bone fracture possesses risk of respiratory problems, which are fat embolism, associate lung contusion, acute lung injury. Early stabilization may not be safe for most severely injured patients or those with associated with other systems injury. We reported a case of 23 years old gentleman, developed post intubation complication after early stabilization of tibial shaft fracture.

MATERIALS & METHODS:
Clinical evaluation, assessment and investigations were done during hospitalization. Medical records of patient was also reviewed.

RESULTS:
This is a 23 years old gentleman, alleged MVA, sustained tibial shaft fracture in which early stabilization was done within 6 hours post trauma. He had previous history of post intubation complication 6 months ago due to fracture contralateral tibial. This patient develop respiratory complication post operative under general anesthesia. Initial chest xray revealed generalized haziness. Final diagnosis was established with clinical evaluation and Computed tomography of thorax after intubation shows lung atelectasis, possibility secondary to lung contusion.

DISCUSSIONS:
Early stabilization may not be safe for most severely injured patients or those with associated with other systems injury. Hence, optimal timing for fixation remains controversial and it is depend on patient’s age, gender, co-morbid and previous medical and surgical history. The modern trauma systems is based on trimodal pattern of mortality, which is proposed by Donald Trunkey in 1983, discussed about three peaks of mortality secondary to trauma. Poole GV et al suggested that the surgical decision must be individualized to each patient’s needs. The delayed treatment has been associated with improved survival rates among patient with serious abdominal injuries and reduction in adverse outcomes in patients with multiple injuries.[1] In addition, delayed stabilization (24-48 hours) may be safer than stabilization within 12 hours for severely injured patients. [2]

CONCLUSION:
In recent years, the concept of “damage-control orthopedics” with delay of definitive fixation in patients with multiple injuries has taken hold. Definitive surgery should be delayed until the patient has more reserve.

REFERENCES: