

Day

T/5, Armd Recon. Bn.,

Injured: 15 June 1943 in auto accident in Algeria.

Admission: 29 June 1943, from the 40th Station Hospital.

Died: 30 June 1943 from pulmonary fat embolism due to his injuries.

This soldier age "unknown", sustained a fracture of the 12th thoracic vertebra and dislocation of it on L1, with paralysis. Seen here, he was very anemic (prolonged sulfathiazole therapy, 3 grams daily for 10 days) and obviously sick. There was complete flaccid paralysis of both lower extremities and lower half of rectus muscles, and sensory loss below the level of the junction of the 1st and 2nd lumbar dermatomes. The bladder was paralyzed and an indwelling catheter inserted. The day after removal the patient was removed from his cast which was loose and bothering him. An hour later he became dyspneic, weak and faint, skin pale and moist and pulse almost imperceptible. Oxygen was started and there was some temporary improvement. Later however he became nauseated, pulse weak and cyanosis deepened. He broke out in a sweat. Death occurred 4 hour hours after the onset.

The salient features of the postmortem were:

Both lungs are edematous and voluminous. The pericardial sac contains about 40 cc of serous fluid. The pulmonary artery is opened in situ and a recent embolus found therein. It does not fill the vessel, is retracted and granular, is not attached to the wall.

The left lung weighs an estimated 500 grams. This increase is due to the extensive edema of the organ. There is no pleural rougher and no obvious area of infection. Many of the smaller vessels contain emboli. The right lung weighs about 600 grams and in all other respects resembles its mate.

The bladder is the site of a moderately severe cystitis. The mucosa is reddened and edematous. There is a small ulceration of the trigone.

Dissection of the retroperitoneal tissues reveals that the 12th thoracic vertebra has been fractured in two places. The enclosed cord segment is badly comminuted and hemorrhagic. Multiple thrombi are noted in the ascending lumbar veins just below the injured vertebral body and it is presumed that these were the source of the pulmonary embolism.

(Microscopic)

Lung - (6 blks; 6 sec): There are multiple bland emboli in the pulmonary arteries. There is considerable pulmonary edema. No actual infarction has taken place, as evidence of necrosis of lung parenchyma is lacking.

Clinical Diagnoses:

- (1) Fracture-dislocation of the 12th thoracic vertebra.
- (2) Flaccid paraplegia.
- (3) Neurogenic bladder.

Pathologic Diagnoses:

RESPIRATORY SYSTEM: Pulmonary embolism; pulmonary edema.

SPLLEN & HEMATOPOIETIC TISSUES: Acute splenitis.

LIVER: Acute passive congestion (marked).

GENITOURINARY SYSTEM: Acute passive congestion of the kidneys; acute cystitis.

GASTROINTESTINAL SYSTEM: None, save moderate gaseous distension.

CENTRAL NERVOUS SYSTEM: Comminution of cord at D12 with hemorrhage.

BONES & JOINTS: Fracture of 12th thoracic vertebra with anterior displacement.

MISCELLANEOUS: Trophic ulcers of sacrum and both heels; cyanosis.

Thrombosis (aseptic) of ascending lumbar veins.