

Wounded in Action, 6 May 1943, in Tunisia

Admitted to 12th. General Hospital, 19 May 1943, from 9th. Evac.

Died, 13 June 1943, of Bronchopneumonia, sepsis induced by empyema, and debility, resulting from his wounds.

This 21 year old soldier received a penetrating shell fragment wound of the left shoulder, tearing across the trapezius muscle, and into the spine, fracturing and comminuting the lamina of T2, T3 and T4, and compressing the dura at level of T3, leading to immediate motor and sensory loss below this level. At operation the same day at the 9th. Evac. Hosp., the wound of entrance was excised, and bone fragments removed. He had a post-operative atelectasis of the right lower lobe. He was very ill on admission to 12th. General Hospital. 10 days later, was in extreme discomfort and coughed a great deal, bringing up thin frothy phlegm. An indwelling catheter was working well. The wound of entrance was large and gaping, the laminectomy wound was open, discharging, and exposed the dura at its base. Several decubitus ulcers were noted, there was edema of the ankles. Neurologic examination revealed sensory and reflex changes indicative of severe damage to, but not complete interruption of cord at the level of T3. He was given special and continuous nursing care, several transfusions, and strict catheter service. A mild bladder infection was present, and a rising white count with no tendency to a left shift indicated a chronic sepsis. Despite gradual improvement in the condition of his wounds the patient progressively lost ground. Signs of a right lower lobe involvement progressed until they suggested a pulmonary abscess. An acute episode of respiratory embarrassment occurred on 13 June 1943, at which time the patient coughed up large quantities of reddish grey, foul smelling pus and appeared to "drown" in his own secretions.

Significant autopsy findings were:

- A. "The entire cervical and thoracic cord is exposed and removed after study. The significant finding is a linear loss of substance in the median raphe on the posterior surface, extending from T2 to T5 inclusive. The solution of continuity is not complete anatomically, the tissues anterior to the central canal apparently being preserved. The cord is very edematous and contains numerous small hemorrhages. The dura overlying the injured segment has been opened surgically. The fractured processes overlying this section have been surgically removed. There is no evidence of infection at this time."
- B. "The right pleural cavity is sealed off by firm, avascular adhesions between the lateral surface of the right lung and overlying parietal pleura. When these are freed by blunt dissection, about one litre of foul red-gray pus belches out of the cavity, flooding the underlying lung.

The right lung is removed only by cutting out the right leaf of the diaphragm, with which it is an integral part. The lower and middle lobes are encased in a green-white pleural shell about 0.5 cm thick. In removal, several smaller loculated pockets of foul pus are found between the lower lobe and the posterior pleura, and the pleural surfaces of the middle and lower lobes bear the tattered remnants of avascular adhesions. Section discloses a completely atelectatic lower and middle lobe. Massive necrosis has occurred, the surface on section being green-black, shredded, and incredibly stinking. The gangrenous changes are limited to the lower lobes; the upper shows a diffuse bronchopneumonia, in which slightly raised roughened areas are surrounded, by inflamed, edematous parenchyma. The hilar nodes are markedly enlarged. The main bronchi contains much foul pus, and one apparently communicates with the pleura, thus forming a broncho-pleural fistula."

Clinical Diagnoses

- (1) Wound, penetrating, severe, of left shoulder and back.
- (2) Fracture, cpd, comminuted, of T2, T3, and T4, secondary to (1).
- (3) Contusion, severe, of thoracic cord, secondary to (1) and (2).
- (4) Pneumonia, right lower lobe.

Pathologic Diagnoses:

RESPIRATORY SYSTEM: Diffuse bronchopneumonia and atelectasis, lower left, left upper, and right upper lobes; Ancient pleuritis, massive, right lower lobe; empyema, loculated, right lower lobe; bronchopleural fistula, right lower lobe.

SPLEEN & HEMATOPOIETIC TISSUES: Acute splenitis; diffuse pigmentation of splenic sinusoids.

LIVER: Cloudy swelling; diffuse hyperplasia of sinusoidal reticulo-endothelium.

GENITOURINARY SYSTEM: Acute passive hyperemia and cloudy swelling of the kidneys; pigmentation of glomerular tufts.

CENTRAL NERVOUS SYSTEM: Traumatic loss of posterior cord substance from T2 to T5 inclusive; edema and hemorrhage of cord substance.

BONES & JOINTS: Surgical removal of laminae of T2, T3, and T4.

Miscellaneous: Generalized hyperplasia of mesenteric nodes; pigmentation of mesenteric nodes; sacral decubitus, extensive; atrophy of lower and upper extremities; decubital ulcers of both heels; numerous venepuncture wounds in both antecubital fossae; postmortem livor and rigor.