

██████: EM. POW.

Wounded in action 17 July, 1944 in Italy.

Admitted to 12th. Gen. Hosp. 21 July 1944 from 15th. Evac.

Died: 26 July 1944, of Pulmonary embolism as result of his wounds.

The German soldier (age ?) suffered a traumatic amputation of his left leg for which a guillotine amputation was performed 25½ hours later at the 15 E.H. where he also received 1000cc of blood and 2400cc of plasma day of operation and a further 1000cc of blood the day following. He arrived at the 12 Gen. Hosp. in good condition. One week post wounding was given 1000cc of "O" and taken to the operating room where inspection showed the stump viable but disclosed an indurated area 15cm in diameter on the anterior surface of the thigh. Because of the thigh infection traction was not reapplied. Twenty four hours after surgery the patient complained of pain in the chest, became restless and cyanotic and went into shock. The skin was cold and moist, the pulse rapid and thready. There was some edema of the right thigh. Oxygen and fluids were of no avail; death occurring in about two hours.

Salient features of Autopsy report: 3,4,5,6,

A. The right lower leg has been amputated through its middle third. Removal of dressings discloses an apparently healthy stump with no evidence of infection. Palpable on the anterior surface of the right thigh about two inches below the inguinal ligament and overlying the main vessels is an area of indurated edema about 15cm in extent. Immediate dissection discloses a woody phlegmon of the subcutaneous tissues at this point which does not seem to extend grossly into the underlying musculature. A thrombus may be traced in the long saphenous vein from its opening into the femoral vein downwards for a distance of 6cm. It is friable and sharply retracted, evidently of several days' standing.

B. The right lung weighs an estimated 600 grams. Save for remnants of old adhesions, the pleural surfaces are smooth. The parenchyma crepitates only feebly and has the consistency of a diffuse, uniform consolidation. On section all lobes have an essentially normal appearance, but are tremendously edematous and have a peculiar consistency, like that of damp spongy velvet. The main bronchi are filled with edema fluid. The vessels and hilar nodes are not exceptional. The left lung weighs about 500 grams and resembles the right, save in the mid-portion of the anterior surface of the left lower lobe. Here there is a recent infarct about 4cm in all directions and roughly pyramidal in shape, the base being at the pleural surface. It is dark red, granular, and firm. The overlying pleura is wrinkled and lustreless.

C. Lung (6 sec): There are several interesting changes. All sections reveal a rather uniform protein rich fluid in the alveoli the linings of which are unusually prominent. In a few alveoli fibrin rings are found. In others, masses of red cells are present, trapped in fibrin strands. Still others contain pigmented mononuclears. The smaller pulmonary radicles frequently have a "dew-drop" appearance; this is shown to be due to a well-developed fat embolism on frozen section. In one section there is a recent hemorrhagic infarct (bland).

D. Liver (2 sec): The changes are confined to the central portions of the lobules. The liver cells here have completely disappeared, to be replaced by scanty young connective tissue containing scattered lymphocytes and occasional pigmented macrophages. The periportal areas are essentially unchanged.

E. Kidney (2 sec): The changes are striking. There is a marked internal hydronephrosis from brown-staining casts in the collecting tubules and to a lesser extent in the distal convoluted ones. Where present these casts have excited much tubular reaction, varying from epithelial nuclear activity to frank tubular necrosis with destruction, disappearance, or invasion of the casts by polynuclears. There is also an accumulation of lymphocytes and plasma cells ranged in the stroma between the straight tubules and evidently representing an old pyelonephritis, since their presence does not correlate well with the location of the casts in many instances. No interstitial granulomata are observed.

F. A peroxidase on frozen section is negative except for a few tubules, where the masses of polys have accepted the stain. In some instances their presence in the casts has imparted a faint greenish tinge to the sulfa aggregates, but for the most part the casts show up as brown-yellow.

G. The immediate cause of death in this patient was a pulmonary infarction. Of itself, I doubt it could have caused death; in conjunction with a pulmonary edema from progressive uremia it was presumably the factor which swayed the balance the wrong way. The origin of the embolus was a thrombus in an inflamed saphenous vein. Presumably the thrombophlebitis was related to the amputation performed lower down on the same leg.

H. The changes in the liver are not those of epidemic hepatitis. They are not due to an organic valvular lesion. I feel that they reflect the changes in the kidney, and therefore have the same etiological basis.

CLINICAL DIAGNOSES

- (1) Amputation, traumatic, left leg
- (2) Guillotine amputation, right lower leg
- (3) Pulmonary embolism

PATHOLOGIC DIAGNOSES

- (1) Sulfonamide nephropathy, severe
- (2) Central cirrhosis of the liver
- (3) Uremic pneumonitis
- (4) Phlegmon of right thigh
- (5) Thrombosis of long saphenous vein near foramen ovale
- (6) Pulmonary infarct, solitary, small, left lower lung lobe
- (7) Incomplete fracture of right tibia
- (8) Pulmonary fat embolism, moderately severe
- (9) Blast pneumonitis, healing
- (10) Right hydrothorax
- (11) Ascites (1000 cc)
- (12) Acute passive congestion of parenchymatous viscera
- (13) Pleuritis, ancient, right lung
- (14) Venepuncture wounds in both antecubital fossae