

Phillips

██████████ - 1st Sgt., ██████████ Ord. Co.

M.A.

Injured: 7 May 1943, in motorcycle accident near Ain-el-turck, Algeria.

Admission: 7 May 1943, direct from scene of accident.

Died: 7 May 1943, of extensive brain damage about 10 hours after his injury.

This 28 year old soldier was thrown from a motorcycle during a road test, sustaining a severe cerebral concussion. He was admitted unconscious and clinical suggested meningeal hemorrhage. Operation was performed about one hour after injury and an edematous contused brain without focal hemorrhage was exposed thru a fronto-parietal flap. Closure was difficult because of tendency of edematous brain to herniate. The patient died in hyperthermia (108 F) approximately 10 hours after injury.

The salient features of the postmortem were:

The head is covered with a bandage, which when removed, reveals a recently-sutured left fronto-parietal flap. The shaven scalp in this region shows marked excoriation and abrasion, but no depressed fracture is externally palpable. The left eye shows moderate sugillation and is closed by the palpebral swelling. The pupil on this side is dilated, as is its mate. There is no bleeding from the ears, or nose and the nose, save for a small abrasion on the bony ridge, is without remark.

Reflection of the recently-sutured scalp flap, as well as the rest of the scalp, shows the following changes: (1) Massive sugillation of the subcutaneun, extending down to, but limited by, the galea. These hemorrhages are most marked in the left fronto-parietal region, but are found generally throughout the soft tissues of the entire scalp. The pericranium, however, is dry. There is no bleeding beneath the surgical flap. Removal of the calvarium fails to disclose any vault fracture, and inspection of the base and cervical spine after removal of the brain yields a similar result. The brain itself is the site of multiple, disseminated subpial hemorrhages grossly and the entire brain is soft and "addled". The edema is so marked that no subarachnoid space as such remains. There is no evidence of extradural bleeding, and the middle meningeal vessels are intact. Immediate repeated coronal sections demonstrate the pressure of fluid blood in both lateral ventricles, as well as in the third ventricle. The fourth ventricle, however is dry. There are numerous petechiae scattered throughout the grey and white substance on the brain, and several echymotic spots are found in the substantia of the cerebral peduncles. The spinal cord was not examined.

( Microscopic )

Lung (1 sec): Several bronchioles contain partially digested food particles in which the remnants of skeletal muscle and seeds are prominent. An early peribronchiolar acute inflammatory exudate is a conspicuous feature of the picture. Alveoli more distantly located are either empty, contain edema fluid, or are marked by the presence of a moderate amount of pigmented mononuclears.

Liver (2 sec): One section is entirely normal. The other shows two changes of note: a fairly well marked periportal proliferative reaction in the form of mononuclear infiltrates and new vessel formation, amongst which occasional polynuclears are found; and undue prominence of the Kupffer cells. The sinusoids are empty for the most part or contain pink-staining fluid.

Brain (cerebral peduncle; 2 sec): These sections show merely numerous focal hemorrhages about the smaller vessels, extending well into the smaller brain substance. There is some perivascular edema.

( Clinical Diagnoses ):

- (1) Possible middle meningeal hemorrhage (left).
- (2) Possible skull fracture.

( Pathologic Diagnoses ):

CARDIOVASCULAR SYSTEM: None.

RESPIRATORY SYSTEM: Aspiration bronchopneumonia, early, mild; pulmonary edema, mild.

SPLEEN & HEMATOPOIETIC TISSUES: None.

GASTROINTESTINAL SYSTEM: None.

LIVER: Periportal hepatitis, patchy, mild.

PANCREAS: None.

GENITOURINARY SYSTEM: None.

CENTRAL NERVOUS SYSTEM: Cerebral edema, marked; hemorrhages, multiple, disseminated, subpial, cortical, subcortical and peduncular; hemorrhage, ventricular, first, second and third.

ENDOCRINE GLANDS: None.

BONES & JOINTS: None.

MISCELLANEOUS: Recently sutured left fronto-parietal flap; sugillation, massive, of scalp (most marked in left fronto-parietal region; sugillation, moderate, of left eye; abrasion of nose.