1st Sgt., Ord. Co.

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 external hemorrhage was exposed through 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 shaved scalp in this region shows marked excoriations and abrasions, but no depressed fracture is externally palpable. The left eye shows moderate subconjunctival edema 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 subarachnoid hemorrhage 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: One section is entirely normal. The other shows two changes of note: a fairly well marked peribronchial 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.

Brain: These sections show merely numerous focal hemorrhages about the smaller vessels, extending well into the smaller brain substance. There is some perivascular edema.

(Microscopic)

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

Brain: 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.