Clark (14)

[redacted] - Pvt., 135th. Inf.

Wounded in Action, 7 July, 1944, near Rosagno, Italy by enemy shell fire.

Admitted to 12th. General Hospital 26 July, 1944 from 8th. Evac.

Died: 14 Sept. 1944, of Ventriculitis, Meningitis, and brain abscesses as results of his wounds.

This 23 year old soldier was struck in the occipital region by enemy shell fragments. At 8th. Evac., the wound was debrided; Xrays revealed many bone chips and metal fragments along a 17 cm. tract from occipital lobe well into the frontal lobe. A fixed cadaver dura graft was put in place. The patient did poorly, and was again operated upon 20 July, the graft being exposed, the brain aspirated (without obtaining pus) and the wound left open. Penicillin therapy was started on 20 July and kept up until his death. The parient arrived 12th. Gen. Hosp., on 26th. July 44, disoriented, restless and irritable. He obviously had a brain abscess. Many bone fragments were seen in the Xrays. The wound was open, and a cerebral fungus was presenting. He was operated upon three successive times in the 12th. G. H., on Aug. 3, 28 Aug. and 6 Sept., with the eventual removal of all the bone chips from the large, long, necrotic-walled abscess cavity; several but not all the pieces of metal were removed as well. The cultures from the cerebral abscess showed non-hemolytic staphylococcus.

The patient was given a great deal of supportive care and did quite well after the first two operations, even though the ventricle was opened during the first operation in the removal of a bone chip attached to the ventricular wall. Following the third operation he gradually developed signs of ventriculitis, generalized encephalitis, and a severe meningitis. He expired on 14 Sept., After several days of fever ranging rapidly from 100 to 106.6.

Repeated spinal fluid examinations were made on this patient. Culture of a specimen on 4 August showed a non-hemolytic staphylococcus. Following prompt usage of penicillin, intrathecally as well as intramuscularly, negative cultures were obtained on 8 August and 10 August. Cultures made at varying dates subsequent to the above, however, persistently and consistently disclosed the presence of a gram-negative diplococcus which was presumed to be one of the meningococcus strains until culture and sugar reactions and negative agglutinations done here dispelled that idea. Subcultures were therefore forwarded to the 15th. Medical General Laboratory. A report received from this laboratory on 3 October states: "Organism submitted for identification considered as belonging to the tribe Mimea, as described by DeBord 1942. It is a gram variable diplococcus and rod mixture. Several strains have been isolated following head injuries. This laboratory wishes full information regarding the case in question and disposition. Further studies on this organism are in progress." A letter embodying the salient facts in the present case was forwarded to the 15th. Med. Gen. Lab. on 5 October 1944 by Captain Rossi.

Salient features of the Autopsy examination were: 4,6
A. There is a rongeuered defect in the occipital bone measuring about 6 cm. in diameter. The dura at this point has been sutured. The brain is the site of a diffuse purulent meningitis, the exudate being gray-white in color and most marked over the basal areas. There is a tunnel-like wound tract proceeding from the left occipital lobe forward to end in the right hemisphere. Further changes await section after formalin hardening.

B. This patient died of a purulent meningitis, evidently caused by a rather unusual organism. From the clinical standpoint we know that it is penicillin-resistant, since it was recovered on several occasions from the spinal fluid during the latter part of of the patient's course and at times when large amounts of penicillin were being administered, some of it intrathecally. The organism was also recovered post-mortem.

CLINICAL DIAGNOSES

(1) Penetrating wound, left occipital region, severe.
(2) Fracture, compound, comminuted, left occipital bone.
(3) Penetrating wound, left cerebral hemisphere, severe.
(4) Foreign bodies, traumatic, bone chips and shell fragments, right cerebral hemisphere.
(5) Brain abscess, right cerebral hemisphere.
(6) Ventriculitis and meningitis

PATHOLOGIC DIAGNOSES

(1) Ventriculitis and meningitis, severe, caused by gram-variable diplococcus
(2) Brain abscess, right cerebral hemisphere
(3) Penetrating wound, severe, right cerebral hemisphere
(4) Operative defect, left occipital bone
(5) Pulmonary edema, diffuse, moderately severe
(6) Acute passive congestion of all parenchymatous viscera
(7) Fatty degeneration of the liver, moderately severe

Additional Microscopic Diagnoses:

(8) Lipoid pneumonia, early, moderately severe
(9) Blast pneumonitis, healing
(10) Sulfonamide nephropathy, minimal.