

CENTRAL MEDICAL DEPARTMENT LABORATORY.
AMERICAN EXPEDITIONARY FORCE.
A.P.O.721.

Jan.23rd.1919.

FROM: J.H.Clark,1st Lt.M.O.R.C.

TO: Capt.B.Jablons,Dept.Wound Bacteriology,C.M.D.L.

SUBJECT:Gas Gangrene,and Serum administration.

Attached find histories and bacteriological findings of cases of gas gangrene,occurring in Base Hospital 17,during the months of Oct. Nov. and Dec.Unfortunately a civil employee of the hospital threw out these charts,when the hospital was being handed over 103.For this reason the histories are incomplete.

Great difficulty was experianced in isolating the causative anaerobe,sufficiently rapidly,to give the corresponding antiderum.In one case an Edematiens was not isolated until four(4) days after the culture was taken.

Of the 29 cases attached,20 received serum treatment,with 4 deaths a mortality of 20%.Two of these,Horrovoets and Towslee,were practically past all help when first seen.Of the 9 cases receiving no serum,3 died a mortality of 33%.But one of these,Burns,was also mortally wounded.

11 of the cases receiving serum,could be diagnosed gas-gangrana from clinical features only.Serum was given to the remaining 9,because of the bacteriological findings,but in no case did symptomes of clinical gas gangrene develop.5 of the cases receiving no serum,could be diagnosed gas gangrene from clinical signs,3 of these dying.The 14 cases not clinically gas gangrene,presented no diagnostic features,except a foul dirty wound with profuse discharge.The dry,glazed wounds were found to be more dangerous than wounds that were draining freely.

In only one case,Boyd,was the effect of serum striking.In the others,particularly those receiving Leclainche and Vallee,and also Bull's serum,Welch bacilli persisted for upwards of a week in the wound,even after 100c.c. of the serum had been given,altho the bacilli may have been detoxicated.There was not sufficient time or available material for testing this.

From the experiance derived from the earlier cases,20c.c. of AntiBellonensis and 30c.c. of Leclainche and Vallee serum,was injected in every case of potential gas gangrene,and repeated if the patient did improve.This,together with extensive debridement and counter-openings to relieve tension and aid drainage,gave the best results;only surpassed by amputation,when the extremity was badly shattered and the condition of the patient allowed this.

CENTRAL MEDICAL DEPARTMENT LABORATORY
AMERICAN EXPEDITIONARY FORCE
A. P. O. 781.

Jan. 23rd. 1919.

FROM: J. H. Clark, Lt. J. M. O. R. C.

TO: Capt. B. Jablons, Dept. Wound Bacteriology, C. M. D. I.

SUBJECT: Gas Gangrene, and Serum Administration.

Attached find histories and bacteriological findings of cases of gas gangrene, occurring in Base Hospital IV, during the months of Oct. Nov. and Dec. Unfortunately a civil employee of the hospital threw out these charts, when the hospital was being handed over to I.O.S. For this reason the histories are incomplete.

Great difficulty was experienced in isolating the causative anaerobe, and it is difficult to give the corresponding anti-serum. In one case an Edematis was not isolated until four (4) days after the culture was taken.

Of the 29 cases attached, 20 received serum treatment, with 4 deaths a mortality of 20%. Two of these, Horvovetz and Towlice, were practically past all help when first seen. Of the 9 cases receiving no serum, 3 died a mortality of 33%. But one of these, Burns, was also mortally wounded.

11 of the cases receiving serum, could be diagnosed gas-gangrene from clinical features only. Serum was given to the remaining 9, because of the bacteriological findings, but in no case did symptoms of clinical gas gangrene develop. 5 of the cases receiving no serum, could be diagnosed gas gangrene from clinical signs, 3 of these dying. The 14 cases not clinically gas gangrene, presented no diagnostic features, except a foul dirty wound with profuse discharge. The dry, glazed wounds were found to be more dangerous than wounds that were draining freely.

In only one case, Boyd, was the effect of serum striking. In the others, particularly those receiving Leclainche and Vallee, and also Bull's serum, which bacilli persisted for upwards of a week in the wound, even after 100 c.c. of the serum had been given, also the bacilli may have been detoxicated. There was not sufficient time or available material for testing this.

From the experience derived from the earlier cases, 30 c.c. of Anti-Belbonensis and 30 c.c. of Leclainche and Vallee serum, was injected in every case of potential gas gangrene, and repeated if the patient did improve. This, together with extensive debridement and counter-openings to relieve tension and aid drainage, gave the best results; only amputated by amputation, when the extremity was badly shattered and the condition of the patient allowed this.