

P.A.W./C.I. : J.C. Balfour

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Origin: Capt. Joseph C. Bullfanter, M.C.

Dates: 1942

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HISTORY SECTION ONE, GENERAL HOSPITAL NUMBER ONE, July 15-July 31, 1942, incl.  
and of  
GENERAL HOSPITAL NUMBER ONE, August 1-November 9, 1942, Inclusive.

By Jos. C. Bulfamonte, Capt. M. C.

Starting on July 15, 1942, this part of the hospital, was known as Section One, which, according to the plan, helped form General Hospital Number One commanded by Col. James W. Duckworth, M.C.. The Officers assigned to Section One were:

Major Wilbur C. Berry, MC, Surgeon  
Major Stanley J. Reilly, Chaplain  
Capt. Ralph C. Berkelhamer, MC  
Capt. Joseph C. Bulfamonte, MC  
Capt. Dan Golenternek, MC  
Capt. Alvin C. Poweleit, MC  
Capt. Alfred A. Weinstein, MC  
1st Lt. Charles B. Armstrong, MC  
1st Lt. George E. Chamberlain, MC  
1st Lt. Edwin W. Tucker, MC

The remainder of the medical personnel was drawn from the medical detachment of General Hospital No. 1 and from the hospital previously existing at O'Donnell. In the latter group were thirty-six non-Medical men used for maintenance work, while fifty of the former group were assigned to ward duties.

The area occupied by Section One was situated on the north side of the reservation, behind headquarters and the building containing the operating room, the X-Ray, Dental and Laboratory units. The majority of the patients were accommodated in one large building, shaped like a square U the limbs of which enclosed two small buildings that were used as wards. Behind the main hospital building, was the Mess Hall known as the patients' mess, while in front was a building used for surgical patients known as ward nine. On the east side were three small buildings (Nipa and swali structures) which were called wards 10 & 11, intended to house incontinent dysentery patients. The main hospital building was divided as follows:

Ward #1-for the Line Officers  
Ward #2-Medical Detachment  
Ward #3-for the Medical Officers  
Wards #4 & 5-for the malarial cases  
Wards #6 & 7-for the dysentery patients  
Ward #8-for the psychotic patients.

*ext.*

On the extreme northwest corner of the area and at the entrance of the American Cemetery was the morgue. All the buildings originally designed for barracks were inadequate and in a sad state of repair. Following the native style of construction, the windows were open and the roofs made of straw shingles-the latter bound and tied to the rafters not too securely so that any strong wind could raise them and allow the rain to come through.

In addition the floors were uneven and contained many cracks. The walls of meager structure allowed rain through sizeable openings between the boards. In general, one of the big problems was to repair the buildings and make them tenable. The impending rainy season made this even more urgent. Ward Nine was almost completely rebuilt. All available space was utilized for beds and our capacity during this time was five-hundred and eleven. In contrast to the floor space formerly used for sleeping purposes, the beds, with clean sheets and blankets, added greatly to the appearance of the hospital. The floors and walls were scrubbed and carbolized. Fecal stains and piles of dirt and accumulated filth were removed. The old five gallon cans used for collecting feces and which were frequently seen uncovered, on the wards, were replaced with box latrines. Supplied with seat covers the latrines were impermeable to flies. The urinals built of tin offered good drainage. Cesspools dug at appropriate places kept the excreta confined and unexposed. In the southwest corner of the main hospital building a library was established which showed an increasingly large enrollment as the patients improved and were able to read. The beds of many types were symmetrically arranged according to their size, lending an air of uniformity. All were furnished with mosquito bars.

While the other sections of General Hospital No. 1, were divided into malaria and dysentery units, the function of Section One was to handle all types of cases. Hence, admitted were patients suffering from various medical and surgical diseases other than common tropical ailments. Included in the list were E.N.T. and eye, abdominal conditions, old fractures, gunshot wounds, jaundice, etc. Most prevalent as entities or in association with the above were the avitaminoses particularly B and C. Acute malnutrition was evident in all types of illness. An average census of four-hundred and forty seven one was carried at all times. Of these one-hundred and forty seven were Americans while the remaining number were Filipinos. During the period July 15-July 31 incl. there were thirty-four deaths or an average of 2.2 deaths daily. The condition of the patients was terrible and it was obvious the problems requiring attention, were sanitation, nutrition, and medication. With minor adjustments and changes Section One took shape and form as a hospital and before long all departments were operating nicely.

On August 1, following the reorganization of General Hospital No. 1 Section One became designated as General Hospital No. 1. Placed in Command was Major Wilbur C. Berry, MC, and with him the following officers and their duties:

1. Major S. J. Reilly, Chaplain, Librarian, Graves Registration and officer in charge of the American Cemetery.
2. Capt. Alfred Weinstein, MC, Chief of the Surgical Service, Ward Surgeon of Ward Nine and Sick Call Officer. *let*
3. Capt. Joseph C. Bulfamonte, MC, assistant Chief of the Surgical Service, Ward Surgeon of Wards 1,2,3 and 8.
4. Capt. Alvin C. Foweleit, MC, Ward Surgeon of Ward 10, Sanitary Officer and Utility Officer.

meager. Yeast and synthetic vitamin B were given when available and in six cases with paralysis and dropsical collections marked improvement followed. Many cases however, died because of lack of specific medication, and the strictly rice diet given before our arrival. Several sudden deaths on the wards were attributed to the acute Cardiac failure in avitaminosis B. Scurvy was rampant in the hospital. Patients, especially Filipinos showed gingivitis and stomatitis. Many, had tenderness and soreness of muscles and the uncontrollable bleeding of hemorrhage in the calf muscles and the uncontrollable bleeding following tooth extractions. In three cases, massive hemorrhage occurred in the abdominal cavity presumably on an ascorbic basis. Many of the patients had swelling of the legs due to hypoproteinemia.

Because of limited space the list will be appended to this report. It is doubtful whether this condition existed alone or associated with some other deficiency state. Dried blood plasma (Lyovac) given intravenously helped some cases but failed in others probably because other deficiencies. Powdered fish helped all patients immeasurably and in some cases responsible for the disappearance of edema, which definitely showed the part played by the hypoproteinic state. Amazing was the failure of tissues to heal in recently incised wounds, the sides of which gaped after the removal of sutures had been in place ten or twelve days. This, supported what was proved a few years ago by American investigators experimentally, that hypoproteinemia and vitamin C deficiency delayed wound healing. These cases all showed rapid healing with the administration of lime juice and protein in some form. There were several cases of nyctalopia or night blindness. Many sore throats were seen which showed gangrenous lesions, comparable to the diphtheritic and kindred conditions of the pharynx. Autopsies were done whenever possible and the usual pathologic findings encountered of malaria or dysentery or associated disease.

All the diagnoses mentioned above had as a common denominator acute malnutrition. These patients were in a deplorable physical state when we arrived. There were undoubtedly many deaths of starvation. Reports have it that in the early days of the hospital the diet was rice and salt and nothing else. With our limited stores, it was a major problem to feed these patients. Not only was there a shortage of food but there were other contentions such as lack of water and wood. An attempt was made to differentiate between the American and Filipino ration and accordingly the Americans were placed on wards 2 & 4 while the Filipinos occupied wards 5 & 6. The diet for all, was essentially rice with whatever additions we were able to make. At first very little could be added but later on, when purchases were allowed by the hospital, substantial foods such as corned beef, eggs, meat, fish, and milk supplanted the rice. Remarkable was the change in the patients physically and psychologically. Grief and depression were replaced by joy and a sense of well being. The patients laughed, they talked and they read. Some got well so fast they even complained the new diet with all its embellishments - about a sign that can always be interpreted as indicating recovery. Disability was followed by stability and vitality. Patients formerly using bed pans walked to the latrines. With the establishment of a commissary fruits and eggs were available which further improved the situation. Gradually well patients were discharged from the hospital and either drawn into our Medical Detachment or sent to the other hospital groups. Of all the Americans only nine failed to show any great improvement. These were put on a special and

died of liver, fish, meats, vegetables and fruits given in smaller and more frequent feedings, in the hope that better assimilation and digestion would take place. Of these, three died despite our efforts while the remaining six showed definite improvement.

The fruits of our efforts were thus realized. The problems as stated above were those of sanitation, nutrition and medication. All were met adequately. It was difficult to keep the wards clean and the latrines orderly and working properly. They required almost constant surveillance. Surprise inspections made this imperative. The mess, handicapped by shortages of food and fuel did a remarkable job in restoring these patients to health. It tremendously emphasized the value of good food and most important of all, the deficiency states and their part in disease. Much credit therefore, should go to the management of the mess. Our supply of medications though ample at first suffered many depletions.

Such drugs as bismuth, coal tars, morphine and its derivatives, emetine, quinine and the sulfenamide group of drugs became very scarce. As the patients improved, the demand for drugs fortunately became less. The library because of its large enrollment was moved to Medical Supply. It served a good purpose and offered an admirable way for the patients to occupy themselves during their convalescence. Everything possible was done to enhance the comfort of the patients. Their spiritual needs were met by a Catholic chaplain, and a Protestant chaplain. The Catholic chaplain held services in the Catholic chapel in the main hospital building daily and administered Holy Communion to patients on the wards unable to attend mass. Protestant services were held every Sunday on each ward for fifteen minutes. Also included were periods devoted to the singing of hymns. Graves Registration handled all the deaths so that all the deceased were properly identified before burial. Records were kept of the patient and the family which will be available for future use. There was orderliness throughout the entire hospital. Moral was high. The personnel showed evidence of discipline and co-operation under trying conditions. All departments functioned smoothly. There was no selling of medicines-no surreptitious obtaining of foods-or no laws broken. Everyone did his part and it would be unfair to commend one particular individual without mentioning everyone in the organization. Obviously a good organization must have good leadership. This quality was not wanting in our Commanding Officer and to him should go much of the credit for the success of this hospital.

The Filipinos were being released daily according to their provinces. On rather short notice, evacuations were made that reduced the census considerably. On Oct 12, a total of twenty-seven Americans were sent to Cabanatuan, 3 being Officers and the remaining ones enlisted men. Most of these were in good physical condition, but frail and weak from long illness, and could well have enjoyed a longer convalescence before being moved. On Oct 20, 2 American officers and 44 enlisted men were sent to Bilibid leaving us only two of the original group of Americans who were too weak for removal. At this writing both of these are doing well. The other Americans being cared for at present are the detachment men who number 27. With the last evacuation wards 1 & 3 which contained the Medical and Line officers were done away with. Just recently our census was bolstered by the arrival of patients from Mindanao all of whom are Filipinos. 447

In reviewing the statistics many interesting facts are revealed. The total admissions from July 15-July 31 incl. were 471 with 34 deaths or a mortality of 7.2 per cent. In the same period there were 147 Americans with 22 deaths or a mortality of 15 per cent. From Aug 1-Nov 9 incl. the total number of admissions

were 918 and the deaths 248 constituting a mortality of 27 per cent. The Americans during this period numbered 125 with 38 deaths or a mortality of 30 per cent. The census to date is Filipinos 311 and Americans 28

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RYE, Jay

PH--Pt admitted to GH# 2 with Malaria on 4/8/42. He cause d considerable difficulty on the ward and had to be punished on occasions. Toward the last of the month he developed diarrhea with frequent wate ry stools.

PI--The dirrhea persisted until the patient became bed ridden, dehydrated and severly ill. He was in that condition when he came to GH# 1 on May 11. Stool specimens were run on him daily but showed only the bacillary type of dysentery and no amoeba. He had severe cramps and almost continous bowel movements and became even more dibilitated. It was felt best to send him to isolation even though he had no amoeba where arrived on 5/13/42. At this time he was considered as having acute ulcerative colitis.

PE--A very thin dibilitated white male in acute distress wi th pain in the abdomen constantly sitting on the bed pan. The abdomen was extremely tender over the entire colon.

Hospital Course: Pt. was given bismuth sulfate and ipecac enemas. The stool specimen was positive for E. Histolytica on 5/16/42. Pt. complained of urinary pain dribbling and pus but urine analysis was negative on 5/25. There were some cyst like E. Hist. on 5/26. By this time the Pt. had begun to get up and about. Next he was put on Pot. iodide and hex enemas. He also received liver extracts and cod liver oil. By 5/30/42 he was up and about nearly all day and on his way to the latrine on 5/31/ at 8:00 while at stool he developed very severe pain in the right lower quadrant. Under an old app. scar. There was marked rebound tenderness but no rigidity over this area. Pt. was in a state of shock with rapid pulse, and nausea. The severe pain continued when seen by the physician. He was ochsnerized. On the 3rd day the pain had gradually disappeared and was less tender. He felt hungry and accordingly was given food. The Colon under the scar continued to feel ropy for some time but gradually got better. Rovsing's remained positive for several days. The rectal showed marked tenderness in the right fornix. On 6/5/42 he was bouts of Diarrhea. The stools were negative for amoeba on 6/7/42. On 6/10/42 WBC 8200 and stool showed strongyloides but no amoeba. Trans. to the regular medical service.

DIAGNOSIS: Amoebic dysentery  
Ruptured amoebic ulcer  
Beriberi.

Was it possible that the perforation was brought about by his straining at stool. In addition he was receiving enemas.

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P.H. \*\* Admitted to Gen. Hosp. No. 2, 3/29/42 with a diagnosis of severe avitaminosis. He was treated for this but remained emaciated until the last of March.

P.I. At that time he developed a severe diarrhea which persisted. On 5/11/42 he was transferred to GH# 1. He had a positive stool with many RBC. He complained of weakness severe abdominal pain and cramps.

P.E. Patient was a tall emaciated white male in acute distress having frequent stools. Markedly dehydrated. Head and chest negative. Abdomen tender over all. Remainder of body was negative except for emaciation.

Rx. Bismuth orally, sulfanilamides, and ipecac. He seemed to be doing O.K. On the 15th he developed severe pain in R.U.Q. Made worst by respiration. The liver was palpable and moderately tender--Its edge was quite firm. He was unable to lie on the right side or back. The next two days the pain continued with slight improvement. On 5/16/42 stool showed E. Histolytica with RBC and Hookworm.

5/18/42 improved--wanted to go out in the sun - taken out on a litter - that evening 5/18/42 he became cold irrational and died shortly after.

3/29/42 -- Admitted to GH# 2 DIAGNOSIS- Avitaminosis severe

5/11/42 --Trans. to GH#1

5/12/42 Positive E. Histolytica many RBC

5/16/42 no Amoeba seen - few RBC - Positive Hookworm

5/18/42 Positive E. Histolytica

5/18/42 Died. DIAGNOSIS-- Dysentery, Entamoebic, Severe (E. Histolytica) cause undetermined.

AUTOPSY--General peritonitis with involvement of small bowel externally, gangrenous by continuity. Exudate very fine. In cul-de-sac large collection of thickropy mucoid pus. The external appearance of the large bowel was O.K. There was some plastic exudate-thickening in several thick ulcers were found at the above places - with undermining, thickening and some evidence of healing. One ulcer in the splenic flexure apparently perforated and walled off. Under the diaphragm there was more thickropy pus. The right lobe near the lower border - an abscess about the size of an egg composed of necrotic and digested tissue - a perforation which communicated with the peritoneal cavity. Diagnosis- Perforated liver abscess.

#### ROBERTS

P.H. --- Patient admitted to GH#2 on 4/6/42 for Malaria. He was put to work after several days of quinine medication. While at work he became weaker and weaker and had to go to bed. To GH# 1 5/5/421 while here he was weak, had

chills, fever, cough and chest pains. In addition diarrhea and emaciation.

P.I. Patient developed diarrhea about one week before admission to the isolation ward. This was severe consisting of 8 to 10 stools daily and causing severe abdominal pain and general prostration. Patient also had fever and bronchitis.

On 5/14/42 he had a positive stool E. Histolytica.

P.E. A prostrate, emaciated bed-ridden white male. There were two old healed scars on the upper abdomen. The entire colon was tender to palpation, thickened and rofy. There was severe dehydration.

Hospital course--Patient was given Neo by vein and Bismuth orally together with Sulfanilamide. He improved very rapidly then suddenly on 5/2/42 he developed

(Continued)

severe pain in the L.U.Q. This involved the back under the shoulder blade but there was no tenderness elicited over the kidneys. A deep breath caused pain and he was unable to lie down without severe pain. The area was exceedingly tender with rebound tenderness  
WBC 5/21/42, 8800. He was considered to have a perforated ulcer and was Ochsnerized. He improved in three days and in 7 days was up and about. The remainder of his hospital stay was negative except for slight bout of Malaria on 5/28/42. Stools were negative on 6/1/42. On 6/3/42 he was discharged.

In addition to the above treatment he received quinine and Bismuth Potassium Iodide by enema.

TAYLOR, Robert, 18, ASN 19055015 Org 4th Chem.

P.H. Pt. was admitted to GH# 2 4/15/42. At that time he had acute dysentery and mental deficiency. He remained there having a chronic diarrhea until he was trans. to GH#1 on 5/11/42. At that time he still had severe diarrhea with a watery stool every hour. At times he was up and about and on others he remained in bed asserting he was too weak to get up. He received sulfanilamide, paregoric and later quinine because he developed a temperature of 101 to 104. On 5/16 while in the chow line he passed out and was carried to the ward pulseless and in severe shock. He recovered shortly as the subsequent notes will indicate. He had a positive stool on 5/17. PI--On admission he had one stool every hour. Had pain in the stomach and sides. He refused examination. He became uncooperative, emaciated and jaundiced.  
Rx. Neo, Sulfanilamide, bismuth and ipecac orally. Gradually became weaker and died. Autopsy findings---Fluid in the abdomen, feco-purulent material. Extremely large gangrenous areas in the cecum ascending transverse and sigmoid and covered with plastic exudate. On section there was gangrene of the cecum. A large ulcer 8 cm in diameter just above the ileocolic junction, the center of which was necrotic with perforation 1 and  $\frac{1}{2}$  cm in diameter. Another large ulcer 4 cm in diameter in the ascending colon - necrotic but no perforation. In the ascending and other the same size with perforation. In the splenic an ulcer 2 cm in diameter with great thickening in the wall of the colon with adhesions and evidences of healing. At the junction of the sigmoid and descending there was an ulcer 3 cm in diameter the entire floor of which was perforated.

Admitted to GH# 2 4/15/42, DIAGNOSIS--Acute dysentery, cause undetermined, Mental deficiency. 5/11/42 Trans. to GH# 1, Hospital Course--5/11/42 Severe diarrhea. Rx sulfathiazole and paregoric.

5/12/42 quinine grs. 30 daily. Temp. 101--no improvement

5/13/42--Six stools, temp. 104

5/14/42--Stool Negative.

5/15/42--Quinine reduced to grs. 20 daily, no improvement

5/16/42--Paregoric and Bismuth. passed out after evening chow. Pt. Pulseless and in poor condition. When seen 20 minutes later pt. seemed good.

5/17/42--Stool positive for E. Histolytica. To Isolation ward. (DeBaker)

Laboratory--5/14 occasional RBC and puss cells - no amoeba seen. Warm specimen requested.

5/16/42--Positive E. Histolytica

5-26--Died

44.

(Continued)

ESONA

DIAGNOSIS: DYSENTERY, entamoebic, Histolytica, acute-ca use undetermined. Autopsy finding confirmed the above diagnosis but in addition there was generalized peritonitis due to perforated amoebic ulcers in the colon.

4/4/42 Wounded.

4/20/42 Skin graft.

4/15/42 Malarial smear, Tertian

5/31/42 Positive E. Hist. gross amount REC.

5/31/42 Trans. to isolation ward with a diagnosis of Gunshot Wound, rt. leg, mild and superficial and E. Hist. acute.

6/1 Bismuth and Lugol. Neo

6/2 Bismuth and Lugol. Neo

6/3 Bowel movements very frequent. Bismuth, Pot. Iodid c. During the evening patient sudden taken with abdominal pain localized in the left iliac segment and extending a reverse Rovsing. No vomiting. Impression rupture amoebic ulcer sigmoid (Proff) 6/4/42 Tenderness and rigidity over L I R with muscle guarding and rather definite localization to this region. There was relative tenderness in the L L Q and Umb. and Epi and including the left hypochondriac region. Peristalsis was active with some borborygmi. Rectal discloses tenderness in the left fornix. Sensation imparted to the examining finger of small ulcer on the posterior rectal wall. Patients Impression, rupture amoebic abscess

Rx. continued Oschmerization (JCB)

6/5/42 Much tenderness over all with maximum point over L I R. Peristalsis negative except for occasional click or twinkle. Distention 2 plus. History of increased pain during the night. No effort or straining. Rectal negative. General Peritonitis. Pulse 132 condition does warrant surgery. Pt. died at 12:45 6/7/42.

Autopsy findings: The peritoneal cavity was filled with straw colored fluid containing bits of plastic exudate. The large bowel in four places showed obvious sigmoid which showed signs of localization with omentum plastered up against the inflamed area. When released a very thin coat of Serosa separated the bowel from flexure and in the transverse colon near the splenic flexure which apparently had several loops were abutted the ulcerated areas showed necrosis and inflammation by diameter and the smallest 2 cm with many intervening areas of alternate ulceration and induration. The edges of the ulcers were thickened and redened with much necrotized tissue. The floors being very thin and flimsy. The cecum seemed clear. Conclusions: Four ulcers of the large bowel visible from the outside with large areas of necrosis and inflammation. Two of which had ruptures. General peritonitis. This is an untreated case of amoebic dysentery i.e. he did not have amoebicidal medication. nor did he receive operative treatment but instead Oschmerization.

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CALAVERO, Domingo C PA  
RONNELLO, Sgt PA  
SOLAND, William R Pvt 2nd Class Obs. USA  
CASTRANO, Miguel, Capt. PA  
TAN, Domingo  
OCTANIA, R  
MORALES, Francisco  
MASUDA  
KAWASAMI  
ISHIKAWA  
KIMURA  
KUBAYASHI  
FUGITA  
MITSUMOTO  
YOSHIDA  
INIMOTO  
SPINELLI, Ralph  
SEBASTIAN, V  
BALAYAT, M  
CASCIA, V.  
BANGLAD, Olinsio  
BALUNGAY, Pedro  
NADAL, Bartolome  
NACION, Florencio  
FAYATIBA  
POLICARTEO, A  
HARRELL, T. E.  
RODRIGES, Gregorio  
CABIAL, Pedro  
ALUNDAY, Dionisio  
RAMON, Pedro  
GABITERO, Rafael  
MIGABON, Igenio  
AGEVIBI, Sabas  
DIAS, Pastor  
HIGUCHI  
GORSINO, Martin  
EUSABIO, Victoriano  
PELAGO, Ramon  
TAN? Lorenzo  
GOBES, Pedro  
LOPEZ, GREGORIO  
MORALES, Romeo  
VELARDEZ, Eugenio  
BENEVIDEZ, Braulio  
QUIJANO, Elieno  
MIGUEL, Tomas  
ILDEFUNSO, Felix

ALAGE, Juan  
GABER ERGS, Julian  
NICADAO, Dominog  
PABO MAN, Riseteto  
MIGO M, Balbino  
CONFRANTO, Crispin  
RIBAL, Alberto  
MAGAY, Albino  
GURAZON, Diosdado  
CASTEN, Cezar  
BOSTES, Victor  
BADAR, Flacidio  
HUNC I, Jose  
MUND EJAR, Telesforo  
SUMA LAG, Irineo  
SASA I,  
GABIALAN, Saturnino

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11

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CONCLUSIONS

1. Greater the muscle tissue greater the virulence.
2. Those associated with fracture more serious.
3. When classical symptoms of odor, swelling, tenderness, drainage, crepitus present-the case is advanced.
4. Drainage present in almost cases - when absent the odor is decreased. Is drainage a late sign?
5. The odor is characteristic and a good diagnostic sign. The presence of flies is a good diagnostic sign (Adamo).
6. Tenderness is the chief diagnostic sign.
7. Crepitus is relatively late and frequently absent. In fact it is absent in the majority of cases (This series).
8. Gauze packing routine and less frequently rubber dam.
9. Deep wounds most virulent that is upper thigh and buttock.
10. Crush wounds usually severe when in a muscular area.
11. Penetrating more virulent (Usually perforating type anyhow).
12. Of the hand not virulent (Usually perforating type anyhow).
13. Skeleton Fraction used in fractures of the long bones with ease and effectiveness.
14. The smear is positive within 24 hours in one case. Another as early as six hours.
15. Definitely penetrating more than perforating develop gas?
16. Thigh most frequent?
17. Crepitus rare and when present there is usually drainage and a foul odor.
18. Multiplicity of wounds - one case had shrapnel wounds of left buttock-left lower leg - right ankle - and chest wall. Gas present in all?
19. By far most wounds are perforating.
20. In penetrating wounds drainage is less marked.
21. Mortality increased in the later days of war inversely as malnutrition and food decreased. Attendants remarked patients didn't seem to stand infection as well in the latter days of the war.
22. Molds instead of circulars in treating wounds (Com pound fractures) especially when gas is suspected

	L	M	UPPER		
Thigh	6	5	5	Shrapnel - 10	Positive smears-9
Leg	4	2	4	Odor-60	Associated Frac.-24
Arm-6				Swelling-63	J.P.-11
Forearm	2	2	5	Tenderness-65	
Hand-6				Crepitus-24	
Foot-2				Drainage-48	
Fingers-3				Local Gangrene-2	
Shoulder-1				Penetrating-19	
Knee-3				Crush - 4	
Hip - 2				Perforating-41	
Elbow -2				Debridement-59	
Ankle-2				Incision-59	
Chest-2				Amputation-14	
Buttocks-2				For. Body removed-4	
Abdomen-3				Peroxide irrigations -64	
				Azochloranid-64	

12

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