

Medical History

Gonorrhoea — a question of tactics

JAMES HOWIE

In May 1943 the defeat of Rommel's army in North Africa opened the way for the allied invasion of Sicily and Italy. Unhappily, during the period of preparation, several soldiers destined to lead the assault acquired gonorrhoea. Unhappily, also, the gonorrhoea was caused by gonococci obstinately resistant to sulphonamides. As more and more assault troops spent their time being ineffectively treated with permanganate douches instead of training for the difficult operation that lay ahead of them, the question naturally was asked whether penicillin would cure the condition.

At that time supplies of penicillin for the British Army were very short, and the issue of the drug was rigidly controlled. The efforts of Howard Florey and Hugh Cairns were concentrated on discovering how penicillin could be most effectively used in the prevention and treatment of infection in war wounds—work whose value was to be firmly established during the invasion of Western Europe a year later. In 1943, however, the effort was understandably concentrated on learning what could be expected from using penicillin to deal with wounds of the limbs, trunk, chest, and head.

Florey and Cairns, in collaboration with colleagues whose names appear in the numerous historic publications describing this work, were devoted and untiring seekers after accurate information about what penicillin could and could not do in circumstances and conditions still unknown. For this work they could never get their hands on all the penicillin they wanted. Allocation of penicillin, therefore, was subject to critical scrutiny. Obviously, with this unknown drug, laboratory control of the observations was essential; thus allocation of the scarce supplies inevitably required an assurance from the director of pathology at the War Office (Major-General Leo Poole of AMD7) that adequate laboratory control was available, that the projected use was important, and that the plans of the inquiry were satisfactory. In addition to the views of the appropriate War Office consultants, General Poole had the immensely wise help of Lieutenant-Colonel Harold Bensted, another regular soldier of great experience and a real understanding of microbiology. In May 1943 I had the interesting experience of being posted to the lowly job of deputy director of army pathology in AMD7. As a result I was included in the great debate: should any penicillin be allocated to treat gonorrhoea in the assault troops preparing in North Africa? In one way, the answer was obvious: penicillin was virtually certain to be highly effective in quickly releasing an important group of men for return to their units. But that was not the only issue, as quickly became clear.

The great debate

Brigadier Cairns and Professor Florey sought an interview with General Poole to discuss the proposal. Harold Bensted

and I were invited to join the discussion. Florey and Cairns were against using penicillin for treating gonorrhoea—even in the circumstances described among the assault troops. They argued, correctly, that the efficacy of penicillin for the treatment of gonorrhoea was well established. Nothing, therefore, would be added to our knowledge of how to use it in war when supplies increased. We still did not know with certainty how best to use penicillin to prevent gas gangrene; in the treatment of burns, head wounds, and wounds of the thorax and abdomen. Moreover, they argued, think of the political consequences. The proposed use of penicillin to treat gonorrhoea would certainly provoke parliamentary questions. Why were all the gallant wounded men unable to have penicillin, while some scallywags received it to relieve them of the discomforts their own indiscretions had brought on them? Could General Poole not imagine Members of both Houses, including the bishops, reading from letters sent to them from relatives of wounded men?

When the interview ended with the general's promising to consider the matter with great care, our visitors departed. Harold Bensted at once declared himself: the military arguments for using penicillin in gonorrhoea among assault troops in North Africa were clear and strong. But the political consequences, of which we had received a probably accurate forecast, were so important that the issue must at once go to the highest possible level for a decision on whether the politicians were ready and willing to face the music if the War Office gave Algiers the go-ahead.

Accordingly, a succinct memo was composed setting out the case for and against, essentially putting up for decision the points already outlined in this article. Unfortunately, the file containing this correspondence has not been traced to verify my recollection of all that followed, but my memory remains clear. For me, this was a new and vivid insight into Army medicine and politics and the facts impressed themselves clearly on my young mind.

A political decision

As I recall it, the file went through the appropriate medical departments at record speed and went from the DG to the AG and thence to Downing Street. It did not linger long there either, and we had it back in about a week. Plenty had been written by various highly placed civil servants, but none of this seemed to give the kind of unequivocal answer we needed. Alongside one minute, however, there was a marginal note in green ink which said: "This valuable drug must on no account be wasted. It must be used to the best military advantage." There was debate about the exact initials attached to the marginal note, but there was no doubt about the green ink.*

*In the War Office Medical Department "the man who writes with green ink" was understood to be Winston Churchill.

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We debated the exact meaning of our instructions; but the general cut through the discussion by saying characteristically "I've got to carry the can." He promptly invited Hugh Cairns and Howard Florey to visit him again to resume discussion on the issue they had raised. Harold Bensted and I were invited to be present as witnesses to the conversation. Harold and I agreed to listen without speaking, which we did. I recall the general's exact words, which I think he had memorised because I recall his pacing to and fro reciting words to himself before the meeting. "Gentlemen," said the general, "you warned me of the political importance of the advice I should give on this matter. I accepted your warning. Consequently, I referred the issue for a political decision. I asked that this should go right to the top. We have had our answer. It is written in green ink—you know, I take it, what that means. I am now clear about my advice. It is that penicillin should be used to treat gonorrhoea among the assault troops in Algiers."

The interview ended in polite exchanges and, so far as I know, there were no political repercussions. My own view is that Harold Bensted's military and political judgment was right, and that Leo Poole's way of handling the event proved that he was

a wise, shrewd, and honest soldier capable of carrying any can that was handed to him.

"I cannot believe," said Bensted, when it was all over, "that the Royal Navy is denying itself the use of penicillin for the treatment of gonorrhoea." "No indeed," said Surgeon Vice-Admiral Sir Sheldon Dudley when the point was put to him, "we are making our own!" They were indeed, under the direction of Cecil Green (Emeritus Professor C A Green of Newcastle) at Carshalton. A sample was produced and later given for testing to a medical officer of the Canadian Army. "Marvellous stuff," was his verdict. "It did two things: abolished the gonorrhoea like magic and so pained the injected soldier that it cured him also of the idea of risking his health again."

Years later (in 1966), I told Howard Florey about the open-ended wording of the marginal note in green ink. He laughed and recalled verbatim what Poole had said. "Yes," he admitted, "what you tell me of the minute is entirely credible; and, of course, Poole did not quote the words. He told us only what he decided after reading the note." He paused and laughed again. "Poole was clever," he said, "and of course he was right."

No reprints of this article will be available.

Pandemic influenza 1918

N R GRIST

Epidemic influenza remains the biggest and unconquered acute threat to human health, inflicting damage and death far beyond familiar notification data. The impact of influenza A is particularly severe during periodic pandemics owing to novel antigenic variants which override immunity from experience of earlier subtypes. It is salutary to remember that we do not really understand why the devastating pandemic of 1918-19 was so severe, and that we cannot therefore be confident that our modern medical measures would succeed against a similar future challenge.

As a reminder of the grim reality of that pandemic, the following letter may be of interest. It was found in a trunk in Detroit among other medical papers handed to the department of epidemiology of the University of Michigan. A copy was given to me in 1959 by the late Dr T Francis, jun, and it is now published with the agreement of Dr V Hawthorne, his successor as head of department.

Copy of an original letter found in Detroit in 1959

Camp Devens, Mass.
Surgical Ward No 16
29 September 1918
(Base Hospital)

My Dear Burt—

It is more than likely that you would be interested in the news of this place, for there is a possibility that you will be assigned here for duty, so having a minute between rounds I will try to tell you a little about the situation here as I have seen it in the last week.

As you know I have not seen much Pneumonia in the last few years in Detroit, so when I came here I was somewhat behind in the niceties

of the Army way of intricate Diagnoses. Also to make it good, I have had for the last week an exacerbation of my old "Ear Rot" as Artie Ogle calls it, and could not use a Stethoscope at all, but had to get by on my ability to "spot" 'em thru my general knowledge of Pneumonias. I did well enough, and finally found an old Phonendoscope that I pieced together, and from then on was all right. You know the Army regulations require very close locations etc.

Camp Devens is near Boston, and has about 50 000 men, or did have before this epidemic broke loose. It also has the Base Hospital for the Div. of the N. East. This epidemic started about four weeks ago, and has developed so rapidly that the camp is demoralized and all ordinary work is held up till it has passed. All assemblages of soldiers taboo.

These men start with what appears to be an ordinary attack of LaGrippe or Influenza, and when brought to the Hosp. they very rapidly develop the most viscous type of Pneumonia that has ever been seen. Two hours after admission they have the Mahogany spots over the cheek bones, and a few hours later you can begin to see the Cyanosis extending from their ears and spreading all over the face, until it is hard to distinguish the colored men from the white. It is only a matter of a few hours then until death comes, and it is simply a struggle for air until they suffocate. It is horrible. One can stand it to see one, two or twenty men die, but to see these poor devils dropping out like flies sort of gets on your nerves. We have been averaging about 100 deaths per day, and still keeping it up. There is no doubt in my mind that there is a new mixed infection here, but what I dont know. My total time is taken up hunting Rales, rales dry or moist, sibilant or crepitant or any other of the hundred things that one may find in the chest, they all mean but one thing here—Pneumonia—and that means in about all cases death.

The normal number of resident Drs. here is about 25 and that has been increased to over 250, all of whom (of course excepting me) have temporary orders—"Return to your proper Station on completion of work". Mine says "Permanent Duty", but I have been in the Army just long enough to learn that it doesnt always mean what it says. So I dont know what will happen to me at the end of this.

We have lost an outrageous number of Nurses and Drs., and the little town of Ayer is a sight. It takes Special trains to carry away the dead. For several days there were no coffins and the bodies piled up something

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