Medical problems at Belsen Concentration Camp (1945)

J T Lewis

With an introduction by H G Calwell,
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INTRODUCTION

Among the documents deposited in the archives of the Royal Victoria Hospital is the autographed typescript of a lecture bearing the above title delivered to the Ulster Medical Society on 1st November 1945 by the late Joseph Tegart Lewis (1898-1969), who was connected with the Royal during the whole of his professional life. The lecture has never been published.

He served the hospital as resident medical officer, resident clinical pathologist and medical registrar. He became an honorary assistant physician in 1929, an honorary physician in 1946, and with the inception of the National Health Service he became a consultant physician. He retired in 1963.

In 1940 he joined the Royal Army Medical Corps, served with the 8th Army in the desert and was taken prisoner on the fall of Tobruk; after two years’ captivity he was repatriated in 1943 under the Geneva Convention regarding medical personnel. He returned to military service as Lieutenant-Colonel in charge of the medical division of a General Hospital, landed in France in 1944 and took part in the Allied advance into Germany which led to the surrender of the German Army in 1945.

The fortieth anniversary of the Nazi defeat and surrender on 10th May 1945 has been celebrated in this present year 1985, and the word Belsen has again rung around the world because of the controversial visit of the President of the United States of America to a German war cemetery containing the graves of Hitler's Storm Troops, who were the agents of many atrocities committed against Jews in Belsen and other concentration camps. At the time of the Nazi surrender, the General Hospital in which Dr Lewis was serving was in the neighbourhood of Belsen, and it was sent into the camp to provide medical service for those imprisoned there. What he and his colleagues saw and did there is related in his lecture. The text of the lecture runs to over 80,000 words. It has therefore been necessary to abbreviate it severely and to edit it according to the space available in the Journal. It is hoped that the reader is left with an adequate picture of what Dr Lewis called 'the Horror Camp'.

HGC

Abbreviated from the typescript of a lecture delivered to the Ulster Medical Society on 1st November 1945.

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When the unit to which I was attached arrived at Belsen after the German surrender, preliminary clearing of the camp had already been done. This was soon completed, and we were present at the official 'burning down' of the Horror Camp.

With the completion of the transfer of patients to the hospital set up in the nearby German barrack settlement, it was found that about 12,000 were in urgent need of medical attention if they were to survive. Two general hospitals were given this task. Our unit, designed and staffed for 1,200 patients, took over about 8,000. We allotted one British medical officer to every 650 patients and a nursing sister to every 150. In addition, there were medical students and Swiss, Italian and German doctors, the last being prisoners-of-war. To these were added doctors who were themselves prisoners in Belsen. The Division of which I had charge took over the care of about 4,500 patients.

I will now pick out the most outstanding groups of cases:-

STAVRATION

This was universal. It varied considerably in degree; a minority of the internees showed a surprisingly good state of nutrition, but many thousands had reached a state of exhaustion and emaciation impossible to believe in a civilised community. The advanced cases presented a terrible spectacle — pitiful skeletons were crawling around looking for scraps and searching in swill bins. In some cases their superficial bones had burst through the skin.

We tried the following methods of treatment according to whether the patient was able to swallow or not.

For those unable to swallow:-

(1) Casein hydrolysate with glucose-vitamin solution given intravenously. This was not a great success. The amount given daily had to be about two litres which the circulation could not stand, and patients frequently collapsed and died. At post-mortem examination it was found that the adult heart had atrophied to about the size of the heart of a ten-year-old child, and the aorta was about the size of a pencil. Hydrolysate treatment was abandoned.

(2) Double-strength plasma or serum was given intravenously; the amount was only half a litre which was sufficient to maintain nitrogen balance. Glucose was also given.

For those able to swallow:-

(1) Casein hydrolysate orally — this was very nauseating, and it was given up.

(2) Unsweetened condensed milk diluted to 1 in 4, or skim milk powder in water, 3 oz feeds frequently. This was the most satisfactory method. In the absence of any complicating disease the patients improved rapidly.

I should next like to mention two diseases closely associated with and really part of the starvation syndrome:-

DIARRHOEA

This was present in all severe starvation cases. There appeared to be four possible causes:

(1) A dysenteric infection: Only a few stools could be examined; true dysentery was not common.
(2) Intestinal tuberculosis was a common cause as many patients with diarrhoea had manifest pulmonary tuberculosis.

(3) Vitamin deficiency of the pellagroid type: In a group of patients with no evidence of tuberculosis treated only with nicotinic acid about 60% responded rapidly.

(4) Pure starvation: We placed in this group patients who did not appear to be tuberculous or dysenteric and who did not respond to vitamin therapy. In those who died, post-mortem examination showed the large bowel much thinned and almost transparent, the musculature being completely wasted. The mucosa was ulcerated.

FAMINE OR HUNGER OEDema

This was present in all our severe starvation cases and varied from moderate pitting of the shins to massive oedema with ascites and pleural effusion. Nephrotic and cardiac oedema were uncommon. The idea generally held that famine oedema is the result of hypoproteinaemia did not seem to be the complete answer as there were patients with low serum protein and little oedema, and vice versa. Vitamin deficiency, 'unknown toxins', etc., all had their advocates. Unfortunately, the oedema fluid was not investigated. In most of the cases where post-mortem examination was done, large blebs of oedema fluid were present on the pericardial sac.

Again our weapon was feeding, and often daily transfusions of double strength plasma or blood caused a rapid decrease in the oedema. Other patients responded to oral feeding with diluted milk but in some the oedema persisted in spite of improved nutrition. A trial with Salyrgan gave good results, and it was found that removal of the oedema by diuresis often produced a desire to eat, and marked improvement followed.

ANAEMIA

The average haemoglobin was around 50%, although patients looked intensely anaemic because of their pallor, which was probably due to a combination of vascular spasm and dehydration. In the few cases examined by sternal puncture, the marrow looked normal. The sternum was often soft and cheesy. Iron was always given, but this may not have been necessary. In cases where the anaemia did not improve one always thought of tuberculosis, and one was right in most instances.

TYPHUS

When we arrived at Belsen, the acute epidemic was dying down, thanks to our predecessors' work in cleansing and disinfecting the patients. Sporadic cases kept occurring, and in some the diagnosis was very difficult. The rash was often scanty and atypical, and the Weil-Felix almost always positive in high dilution which might only indicate previous typhus. The final conclusion was that probably many of these patients were not suffering from typhus, but it was regarded as safer to regard them as such.

We encountered a large series of patients with post-typhus complications, most of which were quite new to us. The commonest were thrombophlebitis, gangrene of the feet, and meningitis (a benign form with a good prognosis, the cerebrospinal fluid showing a marked increase in protein). The differential diagnosis was always
from tuberculous meningitis. The continental doctors emphasised that typhus was common, and many of the patients, when convalescent, complained of severe attacks of chest pain. We had, of course, no electrocardiograph to investigate these cases.

TUBERCULOSIS
Perhaps I should have mentioned this disease first because it was by far the greatest cause of death in Belsen. It was not easy to get an idea of the proportion of patients suffering from tuberculosis because our X-ray and laboratory facilities were scanty. However, in one series of 1,575 suspected cases we found over 30% with extensive and often bilateral lesions. We came to the conclusion that 25% of all the patients in Belsen were probably suffering from acute tuberculosis. All this is not surprising when one considers the degree of malnutrition and the appalling conditions in the original huts where the prisoners were packed, not only in one tight layer but often in several layers, with the dead forming a mattress for the living.

All the usual types and distribution of lesions were found, including many diffuse miliary cases, and a high proportion of patients had acute pericarditis. Tuberculous laryngitis was common and increased the patient's sufferings enormously. Glandular tuberculosis did not appear to be common. Pleural effusions were very common, being present in about half of the patients with tuberculosis. Peritonitis was relatively rare, but it was sometimes difficult to decide whether a patient with active tuberculosis, starvation and generalised oedema with ascites, had peritonitis or not. There were very few cases of meningitis.

VITAMIN DEFICIENCY
It was at first surprising that we did not see well-marked cases of vitamin deficiency, but raw turnips and raw potatoes were eaten when they could be obtained, and this probably accounted for the complete absence of vitamin B-complex deficiency. I saw one boy with what appeared to be pellagra affecting the skin, the mouth, the intestine and his mental state. He responded well to nicotinic acid.

MINOR COMPLAINTS OF INTEREST
(1) A condition suggesting acute cholecystitis was sufficiently common as to attract attention. We had previously observed at post-mortem examinations on patients dying from tuberculosis or other diseases that the gallbladder was frequently abnormal.

(2) 'Belsen Fever': We gave this name to a fever which we could not classify; the chief features were a swinging pyrexia lasting 2-3 weeks, enlargement of the spleen, leucopenia, no rash, negative Widal, and no abnormal organisms in blood, urine or faeces. It may have been an abnormal form of typhus, but we never came to any definite conclusion. None of the patients died.

(3) Acute upper abdominal pain: This occurred especially soon after feeding had commenced. It was no doubt the result of alimentary atony, and it subsided in a few days.

(4) Enlargement of liver and spleen: This was found quite frequently with normal blood picture and no other signs except occasional enlarged glands. We were unable to investigate these patients further.

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I think I have now mentioned most of the clinical problems we met and, if the account appears confused and disconnected, this may be put down to the fact that I have compiled it from memory and from rough notes jotted down at the time. We had great difficulty in obtaining equipment, instruments, crockery and other ward utensils, and our dispensary staff did fine work in sorting out the masses of captured German drugs and giving us a sort of Belsen Pharmacopoeia. Anything I may say will be totally inadequate to express our admiration for the work of the British Nursing Services. I am sure that, since Florence Nightingale's work in the Crimea, British Nursing Sisters have never been faced with such a task as Belsen. They had to cope with dreadful bed sores, incontinence and the tragedy of numberless deaths. Added to this were the language difficulty, the feeding, and the great tact required in dealing with nurses from other European countries. Yet in a month they had transformed the place: their work was endless and the mental strain acute, but they stuck it out to the end without complaint. Almost all the credit for what we did in Belsen is due to the Sisters and, if the story of the camp is ever written, it is hoped they will be given the high place they deserve because they have shed a lustre on British nursing which will never be forgotten.

In my Division, which had the care of approximately 4,500 cases, we were able to discharge as fit just under 2,000 patients after about two months' treatment. Sweden very generously agreed to accept our more chronic invalids who were fit to undertake the journey by rail and sea, and all our orphans. We disposed of about 1,500 in this way. At this stage we handed over to a small military unit and moved from Belsen, not without regret, for we realised that we had been privileged to see a clinical sight not easily forgotten.