

The Hiroshima disaster

The text which we print here, entitled "The Hiroshima disaster", was found recently among the papers left by Dr. Marcel Junod, a former Vice-President of the ICRC, who died in 1961. As far as we know, the text has never before been published, though Dr. Junod probably drew on it when writing the last part of his book "Le troisième combattant" (translated into English as "Warrior without Weapons").

Dr. Junod, an ICRC delegate in the Far East at the end of the Second World War, was the first foreign doctor to visit the ruins of Hiroshima after the atomic explosion and to treat some of the victims. His account, apparently written soon after the event, is therefore a valuable first-hand testimony.

Since then, much has been written about Hiroshima and about the atom bomb, possibly better documented, more carefully considered, more elegantly composed. But nothing has better described, in its simple way, the horror of the situation as Dr. Junod saw it.

The personality of the author stamps this text, which we now publish almost forty years after he wrote it. His account has lost none of its force, and vividly conveys the shock, and also the fears for the future which Dr. Junod felt as he looked upon the devastation suffered by Hiroshima.

The Hiroshima disaster

by Marcel Junod

Introduction

Hiroshima, 6 August 1945—Dawn of the atomic age. A Japanese city with 400,000 inhabitants is annihilated in a few seconds. A new chapter of history begins.

The physical impact of the atom bomb was beyond belief, beyond all apprehension, beyond imagination. Its psychological impact was appalling.

The Japanese military authorities were incapable of suppressing the news. In a few hours, a few days, the survivors told the whole country the incredible story of an incandescent bomb dropped by the Americans and devouring everything in its path.

Three days later, on 9 August, it was Nagasaki's turn to experience the devastating force of this new weapon and the Japanese scientists discovered what it really was. The Emperor summoned the country's military leaders and told them that surrender was inevitable.

Then came the report that the Russians had attacked Manchuria, on 9 August at dawn, eight days before the date agreed upon at the Potsdam Conference. This was another unexpected blow, but its psychological impact was far less than that of the reduction of two Japanese cities to radioactive rubble.

However, those who held power in Japan before 6 August knew that fourteen years of war with China and three-and-a-half years of fighting throughout the Pacific against the United States, Great Britain and Australia had left Japan in an extremely vulnerable position. Three quarters of its naval forces were destroyed and its air force was greatly diminished (the last Kamikazes—suicide pilots—were flying obsolete

aircraft). Its industrial cities had been razed to the ground and this meant that its war production was incapable of replacing the equipment lost or even of producing the essential supplies to carry on the war.

The streets of Tokyo were heaped with radiators and water pipes removed from buildings on War Ministry orders to mitigate the shortage of iron.

Food rations were drastically reduced; it was impossible to find a needle or a reel of cotton in the shops; a broken glass could not be replaced.

According to Japanese official figures, allied bombing raids had already destroyed or seriously damaged 81 of Japan's major cities. In Tokyo, Yokohama, Osaka and Kobe, four fifths of the buildings had been destroyed by fire. There were 280,000 civilian dead and 420,000 injured. Two million houses had been bombed or burned down, and nine million civilians were homeless and attempting to get away to relatives in the countryside.

The situation was grave and Japan's resistance was seriously undermined, especially as the Americans had just established bases on Iwojima and Okinawa, dangerously near the home islands. In spite of that, orders to the soldiers were to resist to the last man to save the Emperor and the flag.

Those who were in Japan at the time knew that a Japanese military victory would probably mean death for all white people found in the territories they were occupying: prisoners, enemy or neutral civilians; and thousands of allied soldiers would be killed in conquering metropolitan Japan. Some diplomatic missions in Japan were so sure that this would happen that they had armed their staff for such an event.

However, the sudden—almost supernatural—apparition of the atom bomb over the cities of Hiroshima and Nagasaki abruptly changed the course of history; the Emperor, still a god in those days, immediately regained his mystical powers and used them to impose unconditional surrender on his generals. In so doing, he handed over to the enemy vast territories, extending from Singapore to the Kuriles and from the Russian-Manchurian border to Borneo; furthermore, he gave the order for 4 million well-equipped soldiers, the great majority of whom had done no fighting, to lay down their arms.

This shows the extraordinary power this man had over his people, an impression heightened by the perfectly calm and disciplined manner in which the surrender was made.

It seems that the capitulation was successful for two reasons: firstly, General MacArthur agreed to respect the Emperor's rank and, secondly,

he decided to repatriate all the Japanese outside Metropolitan Japan, without taking any prisoners.

Indeed, to keep the Emperor at the head of the State was the only way to avoid anarchy; furthermore, repatriating the army and allowing all the soldiers from Metropolitan Japan to return home spared them the humiliation of captivity, which they would never had accepted without a fight to the finish, in spite of the Emperor's orders for a cease-fire.

First Part

At the scene of nuclear devastation

I. How I came to witness the aftermath of the first atom bomb

After leaving Geneva in June 1945 to take up my new post as head of the ICRC delegation in Japan, I arrived in Manchuria on 28 July, having travelled for thousands of miles: Paris, Naples, Athens, Cairo, Teheran, Moscow, Siberia, Chita, Otpor, Manchuria. On 6 August 1945, with no inkling of the tragic events taking place in Hiroshima, I visited the Allied high-ranking prisoners of war held by the Japanese, near Szepinghai (Manchuria), and including Generals Wainwright and Persival, of whom we had heard nothing for more than two years.

On 9 August 1945, several hours after the Russians entered the war against Japan and their planes invaded Manchurian airspace, and on the very day that the Americans dropped the second atom bomb on Nagasaki, I left in a Japanese military plane, at 11.30 a.m., during an alert, from the airfield at Tsing-King, today Chang-Chung, capital of Manchuria. Any encounter with an enemy plane would have been fatal, but luck was on my side and I landed safely the same day at Tokyo.

My Swiss friends were waiting there for me. A bus took us from the airfield to the heart of Tokyo. In the dusk, I could just make out streets on all sides, sections of broken walls, electric wires hanging down pathetically and heaps of rusty scrap iron. Further away, amidst acres of cold ashes, I could see small stone houses here and there, with almost no windows, still standing, miraculously intact. I asked what they were. "Ah", was the reply, "this is obviously your first visit to Japan and you don't know. These minute structures of concrete or robust masonry were built by the Japanese after the earthquake in 1923. At that time, Tokyo and Yokohama were completely destroyed, burnt to the ground

by this natural disaster. The Japanese noticed that only a few stone houses escaped the ensuing fire. When Tokyo was being rebuilt, the wealthiest inhabitants were able to indulge in these structures, in which they placed their most valuable possessions; poorer members of the community had to make do with an ordinary safe in their homes".

Indeed, as I looked closer, I could see hundreds of these safes sticking up intact in the fields of rubble.

We arrived at our friends' home after dark. They were lucky to have found accommodation in a house that had escaped the bombing. They looked at me as if I were a ghost. They had been out of touch with Switzerland for four years. Only the radio, listened to in secret, had informed them of the main news. Their first question was: "What are they saying about the atom bomb in Europe?" They forgot that I had left Switzerland two months before and that for fifteen days I had been among the Japanese, who were as silent as the grave. It was my turn to be astonished and to ask questions. For the first time I heard the name of Hiroshima, the words "atom bomb". Some said that there were possibly 100,000 dead; others retorted 50,000. The bomb was said to have been dropped by parachute, the victims had been burnt to death by rays, etc.

A Japanese working with our delegation, who heard what was being rumoured on all sides, confirmed the news. The people were stunned, demoralized. The stations were teeming with crowds as everyone was leaving the cities; but there was no confusion because the Japanese were naturally disciplined. Furthermore, typhoons and earthquakes had made them used to controlling their fear. Nevertheless, the situation remained serious.

The next day, I met the Swedish diplomats. We all had the same idea. Would this new weapon and the fact that the Russians had entered the conflict put an end to the war?

During the next few days, events moved fast and our feelings proved correct. The general staff were summoned to the Imperial palace. Rumours of an armistice were heard everywhere.

Finally, on 15 August, the Emperor spoke to his people on the radio, for the first time in the history of Japan; he asked them to accept the conditions of the Potsdam Declaration, which called for the unconditional surrender of his country.

I listened myself to the Emperor's speech on the radio, and I invited our Japanese servants to come into the sitting room to hear it as well. I saw them kneel in front of the wireless set and give several deep and reverential bows whilst listening to His Majesty's words. Their faces

were expressionless. Even at close quarters, it was difficult to have any idea of what must be going on in their minds and hearts, but I thought I discerned an inexpressible sadness and a feeling of amazement.

Yes, it was the armistice, but nothing was certain. Many Europeans whom I met, who had known the East for a long time, shook their heads and only rejoiced half-heartedly at the news. It would take some time, a few days, possibly a few weeks, before the Americans arrived and nobody could be really sure of what would happen in the interim. The Japanese, I was told, had an unexpected side to their character and it was best to be prepared for anything. There might be an epidemic of harakiri or total submission, just as there might be a real revolution. All this was not exactly reassuring.

I then thought of the allied prisoners, cut off and stranded in camps in Metropolitan Japan. I hastily called all my fellow delegates together and asked them if they would be prepared to go singly into the main camps to ensure the prisoners' safety and arrange for their release. Every one agreed without hesitation. However, there were seven main camps, and there were only four of us! We then appealed to two compatriots and a stateless doctor, who made up the required number. I briefly explained the seriousness of the situation to them; there was a risk involved, but it was our duty to take it. We hoped that the Emperor's orders would be obeyed; but if they were not, all white people in Japan might find themselves in great danger.

I next got in touch with the representatives of the Protective Powers, Switzerland and Sweden, who agreed to join us. In this way, we were able to make up seven teams of three men. I then approached the Japanese government (Foreign Affairs and War Ministry) to obtain the exact numbers of prisoners of war and civilian internees and to find out where the camps were, as well as to secure all facilities and protection for our delegates on their mission. As soon as the Japanese authorities had given their approval, without any major problems, all the delegates left for their destination on 27 August and we were able to report to General MacArthur, by Japanese radio, that we were standing by with a plan for evacuating the prisoners of war.

Before our delegates left, I instructed one of them, who was to inspect the camps in the Hiroshima Prefecture, to go into the city itself and to inform me as quickly and precisely as possible of the extent of the disaster and the conditions he found there.

At the same time, I asked the Japanese Government to provide me with any documentation they had on the situation in Hiroshima and on the known effects of the atom bomb. Reports were duly handed

to me and, on 2 September, I received the following telegram from our delegate in Hiroshima:

“ Visited Hiroshima thirtieth. Situation horrifying. 80% of town razed. All hospitals destroyed or severely damaged. Have visited two provisional hospitals: conditions indescribable. fullstop. Bomb effects surprisingly severe. Many victims, apparently recovering, suddenly experience fatal relapse owing to degeneration of white corpuscles and other internal injuries. Deaths occurring now in great numbers. More than 100,000 injured still in provisional hospitals in neighbourhood. Grave shortage material, bandages, medicaments. stop. Appeal allied high command asking supplies be parachuted immediately into centre of town. Urgently need large supplies bandages, cotton wool, ointment for burns, sulphamides, blood plasma and transfusion kits. stop. Immediate action necessary. Also send medical investigation commission. Report follows. Please acknowledge”.

Now that I had this documentary evidence, I got in touch on 3 September with the Supreme Command of the Allied Forces and requested, in the name of the ICRC, immediate aid in food and medical supplies for the Hiroshima victims. I offered to go there myself to organize relief operations, as I was the only doctor among the ICRC delegation in Japan.

Some days later the Supreme Allied Command responded generously to my request and informed me, through one of its high-ranking officers, that it would provide the ICRC delegation with twelve tons of medicines and medical equipment for the proposed relief operation and that the material would be transported in six aircraft. A special commission, made up of about ten American experts, physicists, doctors and a photographer, as well as two Japanese doctors, would also be on board. I was to accompany the commission and be responsible for the distribution and supervision of the relief, which was given into the charge of our delegation in Japan.

On 8 September 1945, we left for the airfield at Atsugi, where I boarded one of the aircraft together with several Americans. The flight was very pleasant. We soon left Mount Fuji behind us to starboard and arrived over the large cities of Osaka and Kobe. For twelve miles, there was nothing but devastation; the sites where the cities had stood were an expanse of rusty iron. Everything seemed to have been devoured by the fire. Here and there, however, there were flimsy buildings, still intact, making grey and black patches against the brick-red.

At twelve o'clock, we flew over Hiroshima. We—my colleagues and myself—peered anxiously through the windows and witnessed a sight totally unlike anything we had ever seen before. The centre of the city was a sort of white patch, flattened and smooth like the palm of a hand. Nothing remained. The slightest trace of houses seemed to have disappeared. The white patch was about 2 kilometres in diameter. Around its edge was a red belt, marking the area where houses had burned, extending quite a long way further, difficult to judge from the airplane, covering almost all the rest of the city. It was an awesome sight.

After having flown over the city several times, our plane landed, with all the others, at Iwakuni airfield, about 20 miles from Hiroshima. We unloaded the medical supplies. Several Japanese officers came to greet us and showed us to a bus which was to take us to the Japanese military headquarters of Hiroshima, moved, after the city was bombed, to a small hill fifteen kilometres to the south.

II. Contacts with the Japanese authorities

The bus started and limped along as best it could. The heat was tropical. The road, which had not been repaired for years, was in a pitiful state and we were constantly thrown out of our seats. The engine groaned and we were not at all surprised when we finally broke down in the middle of a village. We got out of the bus. People standing around on the street crowded together and stared at the American officers, whom they were seeing for the first time. It was a strange feeling. There we were, about a dozen men, all Americans, apart from myself, and unarmed. The Allied troops had not yet occupied the country and we knew that we were entirely at the mercy of these Japanese.

Would the mere order given by General MacArthur to guarantee the safeguard of the Technical Commission and to provide it with all assistance needed to carry out its task be enough to protect us? I visualized one of our towns just subjected to a nuclear attack and tried to imagine the reception that the survivors would have given to a Technical Investigation Commission, sent by the enemy after imposing unconditional surrender. I feared the worst. But there was no incident.

On the contrary, the village children came up to us and the Americans handed out several packets of "candy" and chocolate. In the background, the Japanese parents smiled faintly (sign of embarrassment) and the atmosphere seemed to be relaxed. However, the repairs took time and everyone was in a hurry to see the city. A military truck came along the road and I suggested to the American general that we should requisition

it to continue our journey to the Hiroshima military headquarters. One of our Japanese acted as interpreter and, after a brief discussion, we all climbed into the truck.

After that, we soon arrived at the headquarters of the Japanese army in the Prefecture of Hiroshima, located on a small hill. There were several wooden army huts inside an enclosure, guarded by sentries armed with rifles. The duty officer yelled "Present arms" as we went by, the sentries saluted and we were taken to a Japanese colonel and several officers. Introductions were made; everyone behaved impeccably and shook hands; well-trained orderlies brought tea, biscuits and cigarettes. Maps were unfolded and explanations given as to the work the Commission intended carrying out in the area. During this time, several Americans and Japanese took group photographs. Never at any time was there a feeling of hostility weighing on the party; everything was conducted with perfect manners.

This attitude on the part of the Japanese remained a complete mystery to us. The Japanese people have a secret, unfathomable mentality but, deep down, these officers were obeying their Emperor's orders. They bowed to the American officers, not because they were the vanquished but because they had ceased fighting and reverted to their natural politeness.

After having made plans to visit Hiroshima the next day, we were taken to the famous island of Miyajima, where the Commission was to stay for a few days. This island is a sanctuary. We could see in the distance the famous hundred-year old portico, showing that an ancient temple stands there. We landed at sunset in a small village of fishermen and holiday makers.

This island owes its fame to the pilgrimage that Japanese warriors used to make there before leaving for the front. They would ask the Buddhist monks to hand them the written reply to their wishes; if the reply was favourable, they kept the paper, and the charm that went with it, pressed tightly to their chest. If the prediction was unfavourable, they pinned it to one of the sacred trees surrounding the temple, hoping that they might thereby win the favour of a reluctant deity.

All the Americans with me were delighted to experience their first evening of Japanese life. We were put up in small hotels in the pine woods. The floor of each bedroom was covered with a tatami, a mat of plaited straw, very soft and pleasant to walk on. Shoes had to be removed before entering. We were all handed kimonos to go and take a communal bath in a large pool. Several Americans made the classic mistake of the uninformed and threw themselves, covered with soap, into the water,

to the horror of the Japanese staff. Indeed, the custom in Japan—and it is a lesson to us all—is to wash thoroughly with soap and then rinse it off, before diving into the almost boiling water of the bath.

During the evening, as we were talking together, I became friendly with Professor Tzusuki, Professor of Surgery at the Imperial University of Tokyo. He told me the following story himself:

In 1923, Professor Tzusuki, then a young doctor at the Imperial University of Tokyo, was particularly interested in the function of Coolidge tubes, which the Japanese had just bought from the United States to treat cancer. Suddenly he had a strange idea. He took a rabbit from the laboratory and, at 9 o'clock in the evening, taking advantage of the staff's absence, he exposed his rabbit completely to the X-ray lamp, in order to observe the massive effect of these new rays on living organisms. At 9.50, then 10 o'clock, the rabbit showed no signs of discomfort whatsoever. At 11 o'clock, the rabbit was still behaving normally and seemed perfectly alert. A doubt began to enter the young doctor's mind. At midnight, the rabbit gave no visible sign of any reaction. Dr. Tzusuki switched off the apparatus, picked up the rabbit, put it on the carpet of his office and lit a cigarette. He was just musing on this strange experiment, seemingly without results, when suddenly the rabbit went into convulsions and died at his feet. The young doctor could think of no explanation for this mysterious death. Tired and half-asleep, he put the rabbit in the ice-box to examine it later. The next morning, he told the story to his professor, who reprimanded him soundly, reproaching him for the futility of this experiment. He even pointed out that, in some countries, he would have been prosecuted for experimenting on live animals without good reason. However, this did not deter the Japanese doctor. Several days later, he began the autopsy on his rabbit and to his amazement observed hemorrhages and suffusions of blood throughout all the organs: the kidneys, lungs, heart, etc. His scientific curiosity was then stimulated even more. He repeated his experiments. In May 1926, his findings were disclosed at the 27th Annual Congress of the American Radiological Society in Detroit. They were published in the American Journal of Roentgenology, Radium Therapy and Nuclear Medicine in New York and entitled: "Experimental Studies on the Biological Action of Hard Roentgen Rays".

When his work was presented it caused discussion. Today it is interesting to re-read the thoughts expressed at the time by Dr. G. E. Pfahler from Philadelphia. Here below is an account of what he said: "It is naturally almost impossible for us to grasp, in a few minutes, the

significance of the facts revealed in all these experiments. However, as far as I can see, two ideas emerge from these facts: first of all, these experiments are based on the exposure of a whole animal to X-rays and, consequently, the observations made by Dr. Tzusuki concerning effects on the various organs cannot be directly translated into clinical values (as we could apply them in routine clinical work), because we never expose the whole body of an individual. We limit exposure to a part of the body, to an organ or to part of an organ. Secondly, by limiting exposure to part of an organ, the relative effects are obviously less, otherwise we would soon stop using radiotherapy, judging by the effects observed on the various organs”.

Twenty-five years later, Dr. Masso Tzusuki, who had since become professor at the Imperial University of Tokyo, was the man appointed by the Japanese government, and later by the American authorities, to study the effect of X-rays, not on the body of a rabbit but on thousands of human beings, his own compatriots. His findings were almost identical to the observations he had made long before on the rabbit exposed to the rays of the Coolidge tube.

III. Hiroshima

Hiroshima means “the wide island”. Built on the delta of the river Ota, which rises in the Kamuri mountains, it was the seventh largest city in Japan. At the entrance to the town, the Ota divides up into seven rivers which form a triangle enclosing the city and dividing it into a number of islands connected by many bridges. The sides of this triangle, roughly 12 miles at the base and 6 miles from top to bottom, are bordered by gentle hills 500 metres high, covered with pine forests. The apex is the narrow head of the valley; the indented base spreads to the Inland Sea, where all the mouths of the Ota empty their muddy waters.

In this location, Hiroshima was the major port of that part of Japan. It was the administrative capital of a prefecture with two million inhabitants, one of the richest of Japan. It was also one of the great centres of Japanese culture.

The city was the home of the Mori, an important Japanese family, who ruled over ten cities in the west of Japan. This made it the political centre of the west and it was consequently very lively.

In 1889, Hiroshima was raised to the rank of town, the political map of Japan being at that time divided into towns and villages.

Hiroshima owed part of its fame to the fact that Emperor Meiji had stayed there with his chiefs of staff during the Russo-Japanese war in

1905. Since then, it had remained a garrison town and become one of the main military transport centres, while Kure, which was not far away, had become a naval base.

Hiroshima was also an industrial centre. Its canneries, its clothing and tobacco factories and its oil refineries had, since 1941, been geared to the war industry. And it had always possessed several munitions factories.

Its population of 250,000 lived in small Japanese houses—similar to chalets one or two storeys high, with upturned eaves—built out of light wood or dried mud, often thatched. However, some official buildings, the offices of big companies, banks or administrative bodies, were built in concrete or solid stonework.

Apart from its civilian population, many soldiers were stationed at Hiroshima, the number in July 1945 being estimated at 150,000. These soldiers were mainly concentrated in the town centre, in a large area made up of barracks, an arsenal, administrative buildings, etc.

There was therefore a total population of about 400,000 in Hiroshima but this figure dropped by the end of the war because the authorities, fearing air raids, had already begun evacuating women and children.

The town was situated on the main railway line running the whole length of Japan. It was the terminus of a branch line which ran inland, towards the north, and had several regional lines linked by a network of tramways. Two major roads crossed the city, from east to west and from north to south. It had many parks and public gardens.

Before 6 August 1945, the city had remained virtually free of air attacks, apart from two minor bombing raids: one on 19 March 1945 by some planes from the American fleet and the other on 30 April by a B.29 (Flying Fortress).

On 9 September, early in the morning, the Investigation Commission left the island of Miyajima. We walked along the sea shore from our hotel to the small harbour. The air was clear and soft and the rising tide lapped the columns of the portico. We took the boat to cross once more the strip of sea to the main island, where a bus was waiting. As we set off, I found I was sitting next to two Japanese interpreters: Miss Ito, born in Canada, who spoke perfect English, and a journalist who had spent twenty years in the United States. We were now travelling the last few miles before our destination and so were able gradually to appreciate the effects of the atomic bomb, from the outskirts to the town centre.

The first signs of these effects were visible four miles or so from the bomb's dropping point. The roofs looked denuded, as their tiles had

been blown off by the blast. In places, the grass was bleached, as if dried; the Japanese journalist explained to me that the plants, vegetables and rice up to five or six miles from the bomb's epicentre had lost their green colour immediately after the explosion. They only got their colour back three or four weeks later. However, some plants, obviously more sensitive, had died. At three miles from the bomb's epicentre, some houses had been flattened like cardboard. The roofs were completely caved in; the rafters stuck out all round. This was the familiar sight of cities destroyed by explosive bombs. At two and a half miles, there were only piles of beams and planks, but the stone houses seemed intact. At just over two miles from the town centre, all houses had been gutted by fire. All that remained was the outline of their foundations and heaps of rusty metal. This area looked like the towns of Tokyo, Osaka and Kobe, destroyed by incendiary bombs. At one mile or so everything had been torn apart, blasted and swept away as if by a supernatural power; houses and trees had disappeared.

Often, even the foundations of a building had vanished. Poles carrying electric cables, made out of iron girders, were twisted and bent and trailed on the ground. Circular factory chimneys were still standing, whereas the square ones had all collapsed. The town was abandoned, dead. Only a few Japanese soldiers were to be seen. The survivors had fled, terrified by newspaper reports that there would be a danger of radioactivity in Hiroshima for the next seventy years.

We arrived in the centre of the town, next to what had once been the army headquarters in Hiroshima, and were taken to a small hill, from where we had an unimpeded view of the surroundings. Standing there, we could see the city in ruins all around us, sprawling for miles; there was nothing but silence and desolation. In the foreground, large trees had been smashed like matchsticks and huge stones overturned; beyond these, we could barely make out the remains of military buildings, some of which had had massive concrete foundations. Very close, lotus stems jutted from the surface of a pond; their leaves had been torn off by the wind created by the fireball. Several dead fish floated with their white bellies upward. Further, as far as the eye could see, the city had been flattened; the railings of the nearest bridges had been ripped away. We were standing more or less above the very spot where the bomb had exploded. In the midst of an indescribable pile of broken tiles, rusty sheet iron, chassis of machines, burnt-out cars, derailed trams and buckled lines, a few trees pointed their charred and flayed trunks to the sky. On the banks of the river, boats lay gutted. Here and there, a large stone building was still standing, breaking the monotony of the scene.

We started walking, slowly, through the dead city. Some streets had been cleared but most were still strewn with debris of all kinds. At one point, my interpreter told me: "This was a hospital". Look as I might, I could not discern anything. There was nothing but a low ruined wall extending for a few yards. Patients, nurses and doctors had all perished. Nobody had come out alive.

We stopped in front of a large building, solidly constructed, which had seemed, from a distance, to be intact; however, as soon as we glanced inside, we could see that everything had been burned and destroyed by the explosion.

This was true of most of the buildings. Only the area around the harbour seemed not to have been affected, and that was within a very limited area. All the observers agreed that 90% of the city had been destroyed.

The experts from the American Commission did not remain idle. They placed their detectors almost everywhere amongst the ruins. They were adamant: one month after the explosion of the atom bomb, the place was perfectly safe and there was no longer any danger of radioactivity for human beings.

Whilst they were busy making their observations, I visited the hospitals, all of them temporary and most of them hardly deserving even that description. Almost all of them had been set up in buildings which were three-parts destroyed, and the sick and injured had been collected up and crammed together pell-mell. Below is a description of one of them, which resembled all the others:

"This emergency hospital is in a half-demolished school. There are many holes in the roof. On that day, it was pouring with rain and water was dripping into the patients' rooms. Those who had the strength to move huddled in sheltered corners, while the others lay on some kind of pallets; these were the dying. There are eighty-four sick and injured in this hospital with ten nurses and twenty schoolgirls, who seem to be very little girls, aged from 12 to 15 years, to look after them. There is no water, no sanitary installations, no kitchen. A doctor comes in from outside to visit the sick every day. The medical care is rudimentary; dressings are made of coarse cloth. A few jars of medicine are lying around on a shelf. The injured often have uncovered wounds and thousands of flies settle on them and buzz around. Everything is incredibly filthy. Several patients are suffering from the delayed effects of radioactivity with multiple hemorrhages. They need small blood transfusions at regular intervals; but there are no donors, no doctors to determine the compatibility of the blood groups; consequently, there is no treatment."

I also paid a long visit to the Japanese Red Cross Hospital which had, it was generally agreed, miraculously escaped the holocaust. It was a magnificent stone building, well constructed, standing squarely on its foundations. Indeed, the front door and the hall were completely intact and, from the outside, the building looked almost normal; however, as soon as I arrived on the upper floors, I noticed that not only all the window-panes but also the frames were missing, shattered by the blast of the explosion. All the laboratory equipment had been put out of action. Part of the roof had caved in and the hospital was open to the wind and the rain. One of the Japanese doctors told me that a thousand patients had been taken in on the day of the disaster; six hundred had died almost immediately and had been buried elsewhere, in the immediate vicinity of the hospital. At present, only two hundred remained. There were no blood transfusions because there was no equipment to carry out examinations and the donors had either died or disappeared.

We continued on our rounds and saw the same picture everywhere. Supplies to these hospitals were almost non-existent; it was up to the patients' families to bring them food but, very often, the family no longer existed or had fled. In view of the overall lack of relief, the situation was tragic.

We then visited a temporary military hospital, Ugina hospital, which was set up in a former silk factory, more or less spared from the bombing.

As everywhere, the Japanese had kept the best for their soldiers. The hospital had been opened on 26 August and we were there on 10 September. At the beginning, six hundred patients had been taken in; two hundred had been cured, one hundred had died and the rest were still being treated. It was far better organised than the civilian hospitals. Indeed, the Imperial University of Tokyo had sent a team of doctors and laboratory technicians to this hospital from the capital and they had carried out some very interesting work. I have in fact based the following part of my report on their findings. Nevertheless, I wanted to examine each case for myself and I devoted quite a long time to observing some of the patients.

Professor Tsuzuki explained several cases to us. For example, a woman, aged 24 years, had been about half a mile from the centre of the explosion. She had felt nothing for the next few days but had suddenly become very lethargic and tired. Three weeks later, she was admitted to hospital for angina necrotica. The blood test revealed 1,200 leukocytes, 45% hemoglobin and 2,450,000 red blood corpuscles.

Many other similar cases were shown to us. We also saw many burn victims. Most of the time, they were suffering from third-degree burns, localized in one part of the body, often the uncovered parts: the face, hands, arms and sometimes the chest. I shall return to these details later in the text.

I learned that on the day of my visit there were still about thirty thousand injured in the town's fifty temporary hospitals; the others had died, been cured or evacuated.

At the end of the day, I met the director of Public Health and we worked out a plan for distributing the medicines and medical supplies given to me by the Allied High Command.

(To be continued)

Dr. Marcel Junod
