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● *The Accident—A Physician's Perspective*

PERSONAL INSIGHTS INTO THE GOIÂNIA RADIATION ACCIDENT

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AS SOON as I was informed of the accident, on the night of 29 September 1987, I travelled to Goiânia with the Emergency Team. In the Olympic Stadium of Goiânia, a soccer stadium chosen by the local authorities for triage of the population, monitoring, and the first measurements of decontamination, there were approximately 22 victims distributed in eight civil defense tents. Although they had been there for more than 24 h, they had not had access to the decontamination baths yet because the coordinators of the stadium feared that this would contaminate the area.

The first act of the Emergency Team was to monitor those involved in the accident and send them off to take a shower, using soap and water as many times as necessary. Next, we did clinical histories and physical examinations and, after almost 12 h of work, all of the patients had been registered, monitored, and given exams that included biochemical analyses and blood counts.

The most serious victims had already been admitted to the Hospital of Tropical Diseases, but the local authorities decided to intern them in a ward of the Goiânia General Hospital (GGH), where Dr. A. R. Oliveira, two health physicists from the Radioprotection Division, and I headed. On the night of 30 September 1987, we finally entered the ward. It was a very shocking situation. The 11 patients were in the back of the ward, all sitting together, completely alone, without any doctors or nurses from the hospital. Some presented serious lesions and severe pain. Between them, there were two children. They were visibly frightened, anxious, and, above all, they suffered from a feeling of abandonment. They had no idea what was happening; from one hour to the next they had become sick, were hospitalized, isolated, and treated with suspicion. The scene caused us much emotion (Oliveira 1988). At that exact moment, we thought that our participation in this work was fundamental.

The difficulties in executing the work were enormous and innumerable in those first moments. The public hospital of the National Institute of Medical Assistance and Social Welfare (INAMPS) in Goiânia that had received the patients was on strike at that time. The strike affected all of the federally funded hospitals (INAMPS) in the country; moreover, the participation of the remaining

medical and paramedical staff, in those initial instants, was greatly reduced due to fear or misinformation. Despite all technical clarifications on how to manage such patients, the participation of the doctors of the city of Goiânia and the Hospital's medical staff itself during the first phase was slight, again because of fear and/or misinformation.

However, as time went by, some professionals began on their own accord to present themselves for work. I particularly acknowledge the voluntary assistance of Dr. Rosana Farina, a young, recently graduated medical doctor, from the staff of the GGH, who was interested in participating in the accident team. At the end of 3 mo, we were able to obtain new additions to the clinical staff of the radioinjury ward, such as hematologists, surgeons, dermatologists, psychiatrists, infectious disease specialists, and other colleagues of good technical level, who together formed an important knowledge base.

During the 4 mo of work in the GGH ward, so many curious and unusual things occurred that they could fill a book of recollections about the accident. The most interesting things were recounted by the patients themselves. Differing from people in a nuclear or radiation accident in a nuclear or radiological installation, the victims of this accident were not professionals, but laypeople originating from a very low socioeconomic and cultural stratum of the local population. They were waste-paper collectors, owners or employees of junkyards, their relatives, and friends that shared their overcrowded habitations. At the same time that they became victims of the first radiation accident in the history of Brazil, surely the world's most serious accident with ^{137}Cs and one of the worst in number of deaths, soon they also became objects of the world's and country's curiosity. These patients were poor people that had to be confined for weeks without contact with their friends and families.

Thus, the patients reacted in a peculiar and sometimes unexpected way to the doctors; the doctors were accustomed to the usual reaction of the General Hospital's patients, who regarded the doctor as a "savior." Sometimes the patients manifested excitement, other times, depression. We heard phrases such as, "Oh! Doctor, today you are not going to touch me!" The frustration was enormous, as we had never felt rejected like this by other pa-

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tients. Twice we had to contend with unexpected reactions of the patients in the ward, hunger strikes, and even an escape of a patient through the hospital window. (The ward was on the third floor.) The patient returned of his own accord 8 h later to the GGH.

Another curiosity was the surprise the patients revealed when they could identify the doctor's physiognomy. "We used masks, caps, gloves, boots, and overalls. After some time, when we were able to circulate in the infirmary without this attire, many exclaimed with surprise: 'But sir, how different you look!'" (Brandão-Mello 1988).

In spite of all these natural obstacles, the accident in Goiânia was a severe test for the Hospital and the Emergency Team. "It was a hard test, extremely difficult, but I cannot say that the performance was poor" (Farina 1988).

Recognition from the local, national, and international medical community (Selidovkin 1988) was gratifying; however, much greater was the victims' and patients' feeling of recognition, thankfulness, and affection for the doctors of the National Nuclear Energy Commission (CNEN) team. Even now, when we return to Goiânia for medical follow-up, we can immediately identify in their countenances and through their physical expressions, the gratitude, esteem, and affection of each one of them for the members of the medical team.

The experience in this episode was extremely enriching, particularly for me, not only from the professional point of view, but especially on the personal and humanistic level. For close to 6 y now, I have worked with AIDS patients in the Gaffrée Guinle University Hospital of the University of Rio de Janeiro; this is a group that is as much discriminated against by society as were the victims

of ^{137}Cs , who were rejected by an entire city and its population. I believe that my prior experience with the AIDS patients, equally immunosuppressed as those victimized by the radiation accident with the ^{137}Cs , helped me a lot in the management of the Goiânian patients, in which my contribution was mainly in the area of internal medicine and hematology.

In relation to the clinical team, there was an exceptional integration of the medical and paramedical colleagues; each one collaborated with all available knowledge in his/her specific area of expertise. Drs. Oliveira and Valverde, with their subspecialty training in radiopathology and some course work done abroad, formed, together with Dr. Farina and me, general practitioners, a cohesive, loyal, and multidisciplinary team.

The accident in Goiânia was regrettable. Now it falls on each of us to recoup some of this experience and pass it on to other professionals. "The Goiânia episode should transcend the frontiers of the nuclear field" (Valverde 1988). We are just a few medical professionals specialized in the area of medicine and hygiene of ionizing radiation and radiopathology, but we have some training and, now, a unique experience in the management of nuclear and/or radiation accidents.

The accident in Goiânia proved once again that if there is not a hospital philosophy oriented to attend this type of emergency, nothing will function. This country must have a group of specialists, including medical, nursing, and laboratory personnel, who are trained and prepared to manage an accident of this size and who are skillful in handling radioactive and contaminated material. Brazil recently entered the nuclear era, but it has not opened its eyes to radiopathology (Valverde 1988).

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