

## **THE EVENTS OF APRIL 9 (THE "FIRST WAVE" OF ILLNESS)**

### **Methods of PHR Investigation**

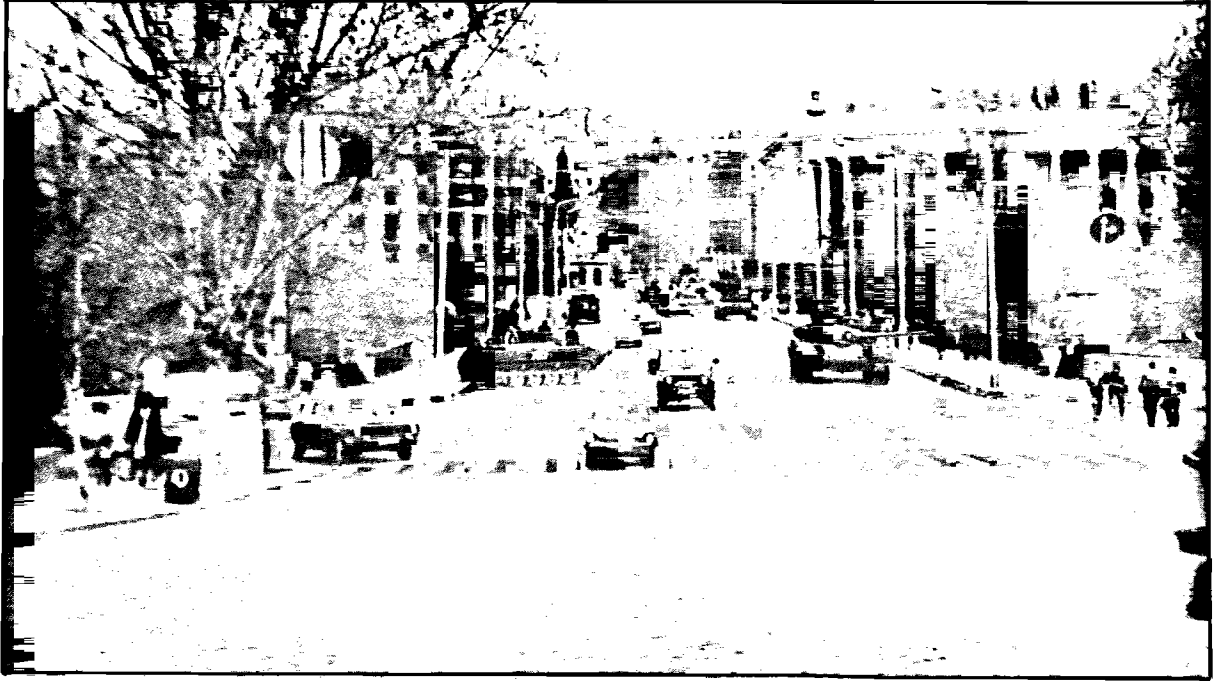
To arrive at a comprehensive assessment of deaths, injuries, and morbidity from the events of April 9, 1989, the PHR team relied on a variety of sources of information. For information about deaths, the PHR team sought out physicians present at the scene or at the hospitals on April 9; newspaper reports and articles (both Soviet and international, official and unofficial); officials in the Ministry of Health; videotape evidence; and testimony of the state pathologists. For injuries, these sources were used as well as interviews with hospital directors and clinical department chiefs. To assess morbidity, the team interviewed and examined patients, reviewed medical charts, and surveyed as many patients as possible by means of a Georgian-English questionnaire prepared in advance. (See Appendix 1.) In addition, one member of the team (Dr. Rumack) visited the state toxicology laboratory, the state pharmaceutical laboratory, and the chemical analysis laboratory of the University of Tbilisi.

### **Description of the Demonstration of April 9, 1989**

The description that follows is based on two videotapes viewed by the PHR team while in Tbilisi.<sup>9</sup> The audio narratives and dialogues were translated simultaneously from the Georgian and/or Russian for the PHR team.

In the early morning of April 9, 1989, a crowd of 8-10,000 Georgians filled the Government Plaza on Rustaveli Avenue, surrounding and supporting a group of 300 hunger strikers positioned on the steps of Government House. Videos taken at the scene, using ambient light from the numerous large standing streetlights, document the mood of the crowd, showing them singing and dancing to Georgian folk music.

Shortly before 4 am, the Patriarch of the Georgian Orthodox Church appeared on the steps facing the crowd and over the public address system urged the demonstrators to disperse immediately, informing them that he had just been told that they were in imminent danger if they did not leave the Plaza at once. The crowd called back its resolution to stay, shouting various expressions of loyalty and devotion to the Republic of Georgia. After several attempts to persuade the demonstrators to leave, the Patriarch stopped pleading with the crowd and stood silent. The thousands of people, also silent, faced him expectantly. After several minutes of complete silence throughout the Plaza, another voice came over the loud speaker, leading the demonstrators in the words of the Pater Noster (Lord's Prayer). Many people in the crowd kneeled during the prayer.



**Soviet tanks and armored personnel carriers stationed in the city during the ten day military curfew, April 1989.**

Shortly after the close of the prayer, the crowd's attention was drawn to the slow progression of Soviet armoured military vehicles, advancing slowly, three abreast, down the broad concourse of Rustaveli Avenue, towards the Government Plaza. Behind the armoured vehicles could be seen rows of helmeted Soviet soldiers, whose plastic shields, sapper shovels, and truncheons glittered in the lights of the Plaza. Instructions from leaders of the demonstration could be heard rippling through the crowd: "Let them pass! Don't resist! Sit down!" Georgian militiamen, who had been disarmed the day before by the Soviet authorities, could be seen standing in blue uniforms among the protestors. Also visible in white coats were several medical volunteers, positioned throughout the crowd.

Within seconds of these first admonitions from the leaders of the demonstration, a phalanx of Soviet soldiers could be seen encircling a group of demonstrators and beginning to beat them with truncheons and shovels. Some demonstrators could not get to their feet. Many soldiers wore long coats and carried shoulderbags. The cameras recorded screams and moans from people as they tried to escape from the advancing soldiers and showed soldiers pursuing and beating people as they ran. Members of the Georgian militia helped demonstrators form an escape corridor through which many fled. An outer group of soldiers stood at attention with shields raised, to some extent obscuring from crowd and camera view the beatings taking place behind them. Four launches of grenades spewing an opaque gas could be seen arching across the crowd.

Three ambulances drove slowly towards the melee and as they came into camera view it could be seen that Soviet soldiers were attacking the vehicles with clubs, bringing them to a halt and breaking their windows.

Within forty minutes, the Plaza was quiet. The crowd of thousands had dispersed, the Soviet soldiers had withdrawn to the periphery, and ambulances were picking up people and driving away. A large yellow bus entered the area where the ambulances were, stayed for several minutes, and then drove off.

## Casualties

### Deaths

In all, 20 people are known to have died during and in the aftermath of the demonstration. Sixteen of these 20 were women. (A so-called "informal" organization in Georgia believes that there were more deaths than officially reported but this point could not be confirmed by the PHR team.)

By 5 am on the morning of April 9, 16 people who were dead or dying (14 of these were women) and many who were injured had been brought by ambulances from the scene of the demonstration to hospitals in the city. Within the next several days, four other people died: three from injuries sustained on April 9, one shot in an alleged curfew violation.



**Natela Bashaleishvili, 16 years of age, during her hospitalization in the First Clinical Hospital. She died of pulmonary edema on April 18, 1989.**

Both the First and Second Clinical Hospitals were on duty that night and received the majority of the casualties. The Adult Hospital of the Republic also received casualties. The following description of the dead and injured are based on information furnished by physicians and medical directors of these three hospitals and from discussions with the Ministry of Health.

a) Reports from Physicians:

Uncertainty remains as to the precise cause of death for the sixteen initial victims, who, according to all witnesses, died within a matter of minutes to one-half hour of the event. The PHR team interviewed four physicians who had been at the demonstration as part of a volunteer medical cadre. These physicians had helped load bodies on ambulances, had accompanied moribund patients to the hospital, had participated in resuscitative efforts, and/or worked on the autopsy subcommittee of the local official investigative commission that was set up immediately after the event. According to these physicians, the majority of the dead lacked external signs of injury. However, one physician said that one victim had blood coming from her mouth, and some of her teeth were broken; another had blood trickling from her nose. One physician said that in attempting mouth-to-mouth resuscitation of some of the victims, he had smelled and tasted something on the victims' mouths that reminded him of bitter, rotten figs.

According to the hospital director, the Adult Hospital of the Republic received two bodies, both women, whom the hospital physicians at the scene described as "still warm." So warm, in fact, that the physicians were unable to decide immediately if the women were, in fact, dead. In acknowledging their confusion to the PHR team, the physicians noted two contributing factors: the absence of external signs of injury and a general sense of disbelief that such a thing could have happened. The women were placed in a single room and three other physicians were summoned "to certify death." One victim was employed as a nurse at this very hospital, and was known to be pregnant.

Details on the cause of death are somewhat sketchy for the four people who died after these initial 16 known deaths. Three late deaths are attributed to injuries sustained in the early morning military attack on the demonstrators. One 16 year-old girl, admitted on the morning of April 9th, died nine days later in the First Clinical Hospital. She was intubated, bloated, and her death was said to have been due to pulmonary edema. A male patient was admitted to the Adult Hospital of the Republic on April 9, unconscious, with skull fracture said to be documented on x-ray. Despite two operations, he did not recover and died several days after admission. Information was not available regarding the third death of a patient admitted with injuries dating from the morning of April 9. The fourth casualty was a man who was said to have been shot by Soviet soldiers in the late evening of April 9 for an alleged violation of curfew.

#### b) Newspaper Accounts:

Newspaper accounts during the first two or three days after the event reported that the dead had been "bludgeoned" and "hacked." Officials at the Ministry of Health told the PHR team that for the first two or three days after the event, before the question of toxic gas had been raised, it was assumed that all deaths had resulted from external trauma or from "asphyxiation" from the crush of the crowd. Not until April 11 and 12, when large numbers of people began to present to hospitals complaining of a range of symptoms suggestive of toxic exposure, did the medical community as a whole begin to entertain the idea that some of the dead might have died from causes other than blunt trauma or crowd crush.

See Appendix 2 for the list of dead, including brief autobiographical details, printed in the weekly Georgian newspaper, Samshoblo.

#### c) Videotape Evidence:

No explanation has been offered or given for the fact that the majority of the dead were women. The videotape edited by Georgian filmmaker Eldar Shengelaya showed a crowd in which the proportion of men and women appeared approximately equal. At the time of the attack of the Soviet soldiers, many people were kneeling or sitting down, in response to instructions from local leaders to avoid confronting the troops. The assault on individuals in the crowd took place at close range.

The videotape included scenes from hospital emergency rooms (including the First Clinical Hospital) and the morgue. The bodies are bloated, a few red and purple discolorations on the limbs and face are evident, a few victims had blood trailing from the nose or mouth. The bodies are clothed and the shots move quickly, not affording a systematic view of all sixteen victims.

#### d) Pathology Reports:

Upon arrival in Tbilisi, the PHR team had requested access to the pathology slides and written post-mortem reports. The team was told by officials at the Ministry of Health that much of this evidence had been impounded by the Soviet military and that what was available was locked in the office of the state pathologist who was away at a conference in Abkhazia.

The pathology evidence made available to the PHR team during this investigation was insufficient to determine the precise cause of death in any of the cases. The state pathologists had performed autopsies on 18 of the 20 who had died immediately or within days of the event. (The families of two of the victims refused permission for post-mortem examination.)

The PHR team was shown a videotape of the presentation that the pathologists had given to the International Commission of the Red Cross (ICRC). This video consisted of slides of lung and brain tissue from a number of the victims, with narration

by the state pathologist. The team saw the video with the deputy state pathologist and questioned him in some detail about the state findings. (The four-member team from MSF was also present at this briefing.)

The autopsy slides as seen on videotape were displayed in an unsystematic and fragmentary fashion and the conclusions drawn by the Georgian pathologists lacked physiological specificity. The discussion that follows summarizes the verbatim presentation as contained in the notes of the PHR team. Terms in quotation marks represent the most precise translations the PHR team could obtain, despite repeated attempts for clarification. Since much of the information received through translation during this entire investigation was entirely clear and understandable to those trained in U.S. medicine, the relative opacity and obscurity of these pathological findings is a matter of concern which cannot be easily explained.

According to the videotape and to the deputy state pathologist, the official results of the autopsies suggested that although none of the 16 initial victims showed signs that were clearcut evidence of poisoning from toxic chemical gas, 12 of the 16 demonstrated marked changes in lung and brain compatible with a "combustion of tissues" "caused by toxic chemicals." Slides of tissue from trachea, bronchi, and bronchioles were described as demonstrating "marked necrosis," "exudative changes," (both general terms to describe forms of tissue injury and death) and "muscular spasm." Slides from brain tissue were presented as showing "edema" (tissue swelling from excess fluid) and "glial proliferation" (abnormal increase in a particular cell type).

When asked about pathological findings from kidney and adrenals, the deputy state pathologist said that only preliminary findings from the first 16 victims had been presented and review of these organs had not yet been accomplished. He said that pathologic evidence relating to the four victims who had died later was in the hands of the Soviet military. With regard to a question about liver pathology among these 16 victims, the deputy state pathologist said that 12 of the 16 had findings consistent with hepatitis. His response was unclear to a question seeking definition of the kind of hepatitis observed. He said all 20 victims, including the four whose slides were held by the military, had evidence of some kind of liver pathology. In the near future, he said, the state pathology office, along with the autopsy committee and forensic lawyers, would perform a careful analysis of the bank of tissues from all 20 patients now in storage.

In response to a question regarding the mix of traumatic and toxic injury among these 16 victims, the deputy state pathologist said, "It is my preliminary opinion that all suffered from chemical or toxic exposure but that maybe traumatic injury contributed as well to concurrent death." He added that all sixteen had evidence of toxic injury to the lungs, indicating to him that all had been breathing, at least briefly, some form of toxic gas. When asked to describe the gross findings of the lungs, he said that they were all surprisingly normal, considering the amount of exudate and necrosis evident on microscopic exam. In his view, this absence of significant gross pathology reinforced the interpretation that all might have died from laryngospasm (constricting spasm of the muscles and structures of the most upper airway) brought on from toxic gas exposure.

## Injuries

According to the chronology of presentation, the first group of patients to seek medical care were those present during the demonstration break-up on April 9 and who were brought or came to the hospitals of their own accord during the hours immediately thereafter. Then, from April 10 to approximately April 14, the second large group of patients, many of them present at the break-up of the demonstration on April 9, began to come to the hospitals. This second group of patients were complaining of a range of symptoms they dated from the morning of April 9.

### a) Data from the Georgian Ministry of Health:

Approximately 150 to 200 patients were hospitalized in the immediate aftermath of the early morning attack. A number of Georgian militia were among the injured and a few reported to have been hospitalized.

According to the Ministry of Health, by mid-day on April 9, 150 patients were listed as hospitalized; 56 of these were women, 8 children. During the remainder of that day, approximately 50 other patients were hospitalized throughout the city. The majority of injuries were described as traumatic, presumably inflicted by the truncheons and sapper shovels the soldiers had carried. About 10 of these 150 initially exhibited signs of exposure to a "lacrimating" agent and possibly some other agent as well. (Symptoms were described as including dry throat, disturbance of respiration, scleral hemorrhages, transient capillary dilation, allergic and contact dermatitis.) Of these 150-200 patients, health officials said that approximately 30 were still hospitalized in various wards of the 44 general and specialty hospitals throughout the city.

Another group of patients sought medical care in the days thereafter, and many were hospitalized. In the first few days after April 9, hundreds came to area hospitals complaining of a range of symptoms. Many of these people were initially quite ill, some with pulmonary symptoms that required respirator support. They presented what the Georgian physicians called a "polymorphous" picture: mydriasis (dilated pupils), lacrimation (tearing), laryngospasm, bronchospasm, pulmonary edema, hematuria (blood in the urine) in the absence of external trauma, skin rashes, including blisters and vesicles around the mouth and oropharynx, gastrointestinal complaints, and a wide range of psychomotor disturbances, including extrapyramidal, Parkinsonian-like findings, several patterns of memory impairment, mood and behavior alterations, and waxing and waning orientation and consciousness. According to the Georgian health officials, most of these patients had been discharged by May 17.

### b) News Sources:

News sources additionally reported that one man was injured on the morning of April 9 by a gunshot wound to the head, causing loss of vision in both eyes. Scenes of this man in the hospital are contained in the videotape edited by Eldar Shengelaya.

### c) Hospital Reports:

The director of the Second Clinical Hospital reported that 94 patients had been admitted in the first day after the event. Many of these were comatose or stuporous and were treated as cases of head trauma or asphyxiation secondary to external compression from the crowd. Two or three days after April 9, when hundreds of people began to seek medical attention for this complex mix of "polymorphous" symptoms, the physicians began to entertain the diagnosis of toxic exposure.

Physicians at the Adult Hospital of the Republic stated that 86 people presented for treatment to the hospital on April 9, and that 55 were admitted. Of these 55, three were among the 20 officially listed as dead (the two women described earlier who were determined to be dead on arrival and one man, also mentioned earlier, who died later from head injuries). Most of these 55 patients suffered from traumatic wounds and recovered uneventfully. Only one or two patients from the group admitted on April 9 were still in the hospital as of May 18. From the hundreds who sought care in the first few days after April 9, however, a number of patients were still hospitalized. In the view of the director, the majority of those still hospitalized were "not sick" but were showing signs of "emotional stress" and the "psychological effects" of exposure to toxic gas (emphasizing, however, that by this statement he meant the biological effects of the toxic gas on the central nervous system, not that patients were suffering from a "functional," non-organic set of symptoms).

At the Pediatric Hospital of the Republic, it was reported that students at the First School next to the demonstration site began to feel ill in the week the schools re-opened on April 17. On April 21, the child of a physician who works at the Pediatric Hospital was admitted with the question of poisoning from toxic gas. On April 22, another child from the same school was admitted. A peak in admissions occurred on April 23, when 14 children from that school were admitted, and several children from other schools were treated and released.

The symptoms of these children were described as: frontal and temporal headache, dizziness, lacrimation, burning of eyes and throat, abdominal pain, nausea, vomiting (among a few), moderate nose bleeds, constipation or diarrhea, general weakness, cough, difficulty breathing, unpleasant sensation in chest, sense of feeling one's heart beat.