U.S. Physicians Probe Deaths in Soviet Georgia

Delegation finds old riot control agent, but no nerve gas, used in Tbilisi; population still traumatized

AT 4 A.M. ON 9 APRIL, Soviet troops armed with sharp shovels, clubs, and shields waded into a crowd of 10,000 Georgian nationalists who were holding an all-night demonstration in the city of Tbilisi. The troops broke up the gathering with a brutality that left 20 people dead.

Reports immediately began appearing in the Soviet and Western press that some of the victims had died from poison gas. And these suspicions were fanned over the ensuing weeks as scores of demonstrators remained hospitalized with a range of unexplained symptoms.

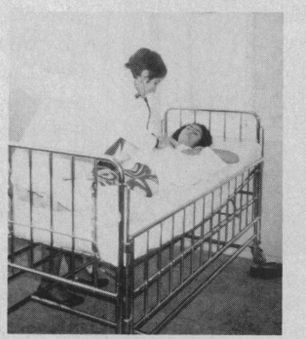
Last week, a team of three U.S. physicians returned to the United States from an extraordinary fact-finding visit to Tbilisi with a less sinister, but no less dramatic, explanation. The group found no evidence that nerve gases had been used, but they reported that an old riot-control agent called chloropicrin was probably employed along with the more common tear gases CS and CN (the active ingredient in mace). Most of the deaths were apparently caused by physical trauma, but a few demonstrators may have died after being sprayed directly in the face with tear gas.

These conclusions are tentative because the delegation, which was sponsored by the Boston-based Physicians for Human Rights, did not arrive in Tbilisi until 17 May, more than 5 weeks after the massacre. They had applied for permission to go as soon as allegations of poison gas use first surfaced, but Soviet authorities initially gave them the cold shoulder. It was apparently an intervention by Andrei Sakharov that paved the way for the visit.

Sakharov himself visited Tbilisi on 4 May as part of a fact-finding mission. When he returned to Moscow, the Physicians for Human Rights contacted him and, shortly after that, they were informed that they should apply for visas.

Soviet military authorities had initially denied using riot control agents, but about 10 days after the demonstration they admitted to using CN. Sakharov announced on 5 May that he was told that CS was also used. According to Barry Rumack, a toxicologist at the University of Colorado who was one of the three U.S. physicians who visited Tbilisi, some of the people treated at the hospitals apparently had symptoms such as dilated pupils, dry mouths, and increased bowel sounds, that are not produced by either CS or CN, however. Rumack and the Georgian physicians treating the patients were convinced that a third gas was used.

The evidence implicating chloropicrin came from a canister that was allegedly picked up at the scene of the demonstration and had been locked in the safe of the chief toxicologist of the Georgia Ministry of Health. When Rumack ran a sample from the canister through a mass spectrograph, "it was clear that what we were seeing was chloropicrin. It matched perfectly."



Physicians for Human Rights

Before and after. *Soviet troops in Tbilisi before the demonstration. Delegation leader Jennifer Leaning examines a victim.*

Chloropicrin was first developed during World War I and was used in 1916 by Russia, Britain, France, and Germany. A 1963 U.S. Army manual lists a mixture of chloropicrin and CN as a military agent, used for training and riot control. The manual describes chloropicrin as "a vomiting agent, a choking agent, and a tear agent," and notes that it may cause lung effects and produce symptoms such as vomiting and colic that "may persist for weeks."

But chloropicrin would not be expected to produce sudden death. Although autopsy reports were impounded by the military authorities, the U.S. delegation was told that five people died apparently from the use of gas. Rumack offers this possible explanation: The victims may have died not from the riot-control chemicals themselves but from a massive dose of a freon compound that is used as a carrier for CN. Rumack says there were reports that tear gases were sprayed directly into the nostrils of some demonstrators, and freon, he says, can cause cardiac arrythmia in high doses.

Could a more lethal agent have been used? Rumack believes not, because a videotape of the 9 April demonstration shows that the troops were not wearing gas masks or other protective clothing.

The delegation found the city still traumatized by the event 6 weeks after it happened. So deep were the emotional scars that 300 to 400 children and adolescents sought medical attention around 19 May for symptoms of what seemed to be toxic exposure, but which turned out to be severe psychological reactions to the tragedy.

According to delegation member Ruth Barron, a psychiatrist at McLean Hospital, which is associated with Harvard Medical School, the children were suffering from deep insecurity, and "the population as a whole was upset and traumatized." The children, who were examined by the U.S. team and a team of French physicians visiting Tbilisi under the auspices of Médecins sans Frontiers, came down with these symptoms at the culmination of the traditional 40-day period of mourning.

One of the most remarkable aspects of the physicians' visit may be the fact that it took place at all. "As outrageous as this event [the massacre] was, there's a point to be made that the Soviet government allowed us in and allowed us to work with the Georgia authorities." says Jennifer Leaning, chief of emergency services at the Harvard Community Health Plan, who led the delegation. "It is evidence that glasnost is at work."

Further evidence that glasnost is at work—and of the deep impact this incident has had in the Soviet Union—came last week when the first session of the new Congress of People's Deputies engaged in a heated public debate over what happened.

■ COLIN NORMAN