



A Letter from Osijek

Robert S. Chernack, MD and Lawrence Dressner

[Editor's Note: War has been an ever present fact of life in the former Yugoslavia since the breakup of the Yugoslav federation into three separate nations -- Serbia, Croatia, and Bosnia-Herzegovina -- in the early 1990s. Civil war erupted between Serbia and Croatia in the late winter of 1991, and the world heard the term "ethnic cleansing" for the first time, to describe the military campaign by the Eastern Orthodox Serbs to invade Croatia and drive out its largely Roman Catholic inhabitants. A truce was negotiated in 1992 (though the war moved on to Bosnia), and even though the active conflict between the Serbs and Croatians had ended, the consequences continued to be severe and long lasting. Dr. Robert Chernack and journalist Chuck Dressner first visited the town of Osijek in August 1993, and Dr. Chernack, an orthopedic surgeon, worked side-by-side with his Croatian colleagues in their devastated operating room. The two made a second trip to Osijek in April, where they found that little progress had been made in the intervening months to restore the health care system to pre-war conditions. M&GS is publishing their first-hand account of the continuing impact of the war on one piece of Croatian life, in order to provide a glimpse at the abiding physical, social, and psychological consequences long after the shelling has stopped. M&GS 1994;1:87-91]

The ten months of relentless Serbian bombing of Osijek and the surrounding region in eastern Croatia suddenly stopped two years ago. While the war continues to the south in Bosnia, idle Serbian artillery stand surrounding Osijek on three sides, only two kilometers from the center. We have returned to the city, after an earlier visit in August of last year, to oversee the delivery of \$750,000 worth of donated med-

ical equipment procured from Direct Relief International for the Orthopedic Hospital.

The glaring evidence of war startles us as we enter Osijek. Many windowless buildings flank the shrapneled streets. Croatian soldiers, toting semiautomatic weapons, trudge among the civilians, past boarded up storefronts that await repair. Everywhere, it seems, sandbags are loosely piled up against ground floor windows. Although life is heading toward normality, the lingering consequences of the war continue to present hardships across the whole spectrum of life. During the present indeterminate pause, the population struggles to reflect and to adjust. We became acquainted with one segment of that population: the doctors of the Orthopedic Hospital of Osijek.

Eight orthopedic surgeons are seated

At the time of publication RSC was an orthopedic surgeon at Harvard Community Health Plan, and Clinical Instructor, Orthopedic Surgery, Harvard Medical School. Boston, MA USA; LD was a freelance journalist from Rochester, NY USA.

© Copyright 1994 Medicine and Global Survival

around the long, sun-streaked conference table. It is seven-thirty in the morning and they sip hard black coffee and Cokes. Three young residents sit deferentially silent as the Chief of Orthopedic Surgery, Dr. Ivica Mikolasevic, briefs them on the daily agenda. The other surgeons civilly give the Chief their attention. The Chief is a bear of a man: barrel-chested, with large rounded shoulders, wide forearms, and chubby fingers that hold an ever present lit cigarette. As well as being slightly overweight, Dr. Mikolasevic chain-smokes three packs of filtered cigarettes a day. His round, fleshy, shaven face holds an attentive, kindly stare. For the past two years he and his team of doctors have met daily to schedule the day's operations and to review the previous day's procedures.

What little discussion takes place at the table is labored and quite spiritless. The Chief turns to one of the residents and nods. The young man dutifully moves to the x-ray box and slips on the x-rays of a fractured tibia. All eyes look at the screen, where the leg of a 70-year-old man who has waited 16 months for an operation is pictured. Such waits have become commonplace. Three of the doctors calmly exchange medical opinions concerning the procedure to be performed today, and Dr. Mikolasevic then assigns the operation to Dr. Borna Wertheimer who, in turn, chooses his assistant. Two more sets of x-rays are displayed and the ensuing comments are equally subdued. There will be a total of three operations today; no more than three have been scheduled on any one day for the past two years due to limited hospital supplies and facilities.

After the war-related emergency cases stopped flooding in, the amount of work had become manageably regular. A benumbed fatalism has settled like an imperceptibly gathering dust. In less than one hour the meeting is concluded and the doctors drift out of the room. Two go to conduct examinations of the out patients. Wertheimer and his hand-picked assistant go to scrub in. The other four men head to the patient wards. These were the men who stayed during the war, working tirelessly to care for the wounded in extremely bleak conditions. In the face of adversity, they have rendered a high degree of care to the population. They have offered new information about the treatment of open wounds. They continue to publish their results and analyze their cases, reporting to their colleagues their successes and failures in the treatment of severe war injuries in a civilian population in a non-military hospital.

When his work at the hospital is finished

Dr. Mikolasevic travels through the region attending one rural clinic after another. Some clinics are just meters from Serbian-held hamlets. Roadblocks are prevalent. Dr. Mikolasevic carries a fully loaded 9mm automatic pistol for protection as he rushes from one village to another to render care to the greatest number of patients. He asserts that he will not hesitate to use either the pistol or the Kalishnikov rifle he keeps at home in Osijek. Despite the danger, however, he continues to treat patients in the region in order to supplement his four hundred dollar per month hospital salary. When he operates, he performs surgery at maximum speed in order to conserve precious hospital supplies such as saline, plasma, and blood. He manages to find time to travel to Turkey, Austria and elsewhere searching for bargains on much-needed prosthetics and hospital equipment, and to solicit donations.

What was it like during the bombing? We had learned much of the answer at the Chief's house. Due to his travel and "call" schedule (protocol dictates staying nights in the hospital), Dr. Mikolasevic is home only two to three days per week. His relentless pace is astonishing. When he is at home, he pores over research journals and brochures on medical equipment in between taking phone calls. Ivica Mikolasevic is quietly diligent when it comes to his work. But when it comes to sharing his memories of life during the invasion, he turns pugnacious.

While his wife Mariana prepared dinner, Dr. Mikolasevic poured us drinks. With war photos spread across the coffee table he riddled out tales of war and atrocities like machine-gun fire. There was something aggressive in the way he related his stories that seemed to betray his anger. We sat and listened as he described how even the Orthopedic Hospital was hit in the first few hours of that spring day in 1991. Casualties streamed in almost immediately. Some of the staff deserted. Of the original staff of four orthopedic surgical nurses, three chose to retire. Another, a Serb woman, fled the city. Three orthopedic surgeons (a Croat, a Serb, and a Montenegrin) ran away two days later. Our storyteller leaned over, crushed out a cigarette, and went on somberly. "Another surgeon, a Serb, was thrown from the third story window of the hospital when she was discovered sniping at fellow doctors in the courtyard below."

Dr. Mikolasevic raised his Scotch glass to his lips and as he drank the last drops the ice rattled. He poured another drink and continued. "A few months later the Croatian doctor [who had deserted earlier] returned to the hospital and asked to be reinstated. I put it to

a vote of the doctors and they voted no." [Dr. Kresimir Janosi, Chief of General Surgery, confirmed this story and explained the reasons behind the refusal to reinstate the run-away doctor. Those who had remained had labored under severe circumstances. When food had run out two months into the invasion, for example, Dr. Janosi and Dr. Wertheimer ventured onto the bomb-blasted upper floors of the hospital on their hands and knees to search for left over food among the personal belongings of the patients being cared for in the basement. Surgeons strained under the faint glow of handheld flashlights to perform major operations. Despite attempts to arrange workable shifts, doctors ended up on call for numerous days at a time. Regardless of the obvious need for an additional surgeon to handle the case load, the doctors who had remained resented their former colleague for having abandoned them.]

Health Care During the Invasion

Before the Serbs invaded Croatia, an average of 1,100 operations per year were performed by both the Orthopedic Hospital and the General Hospital which, between them, provide care for about one million people. While the hospitals were severely understaffed in 1991, the year of the invasion, the number of operations mushroomed to 15,000. Dr. Mikolasevic reports that "compared to approximately 150 pre-war lower extremity operations performed in 1990, 691 lower extremity cases (563 were opened) were operated on during 10 months of war, an increase of 460 percent. Of more than 5,000 patients treated at Osijek Hospital during 1991-92, 1650 were admitted for surgery; of these, 82% had extremity injuries. Altogether there were 2,178 extremity injuries treated (due to multiple injuries); 60% of these were lower extremity blast injuries and 2% had concomitant blood vessel injury. Many of these patients were treated with external fixators for limb salvage with good results."

The orthopedic hospital building incurred heavy damages during the invasion. Surgery was performed in the hospital basement throughout all 10 months of daily shelling. Every hospital bed was moved to the basement and many remain there. For three months of the war individual gasoline generators provided only minimal power in the building. The lack of air conditioning during the hot Mediterranean summer months made working and recovery environments barely sufferable. On one July afternoon during an upper extremity procedure on a 12-year-old boy, while the operating room temperature reached 55 degrees centigrade, a small spark ignited alcohol that had

been applied to prep the boy for his operation, causing him third-degree neck and shoulder burns.

The high volume of war-injured people over stretched the capacity of support personnel. On one day alone, in November 1991, 119 patients were admitted to the hospital. Undertrained medical technicians were pressed into service in order to deal with the large numbers of both civilians and soldiers who were wounded. As a result, the quality of primary care administered en route to the hospital was greatly compromised. As one safeguard against sniper fire, shells, or shrapnel striking ambulances and cars transporting patients, a schoolbus was sheathed in armor-plating.

Triage, however, was managed by an experienced traumatologist, Dr. Kresimir Janosi, and this contributed to the high in-hospital survival rate during the invasion. "The hospital mortality rate during the 10 months of bombing was only 2.6%," according to Dr. Janosi.

The treatment of acute traumatic injuries was made even more difficult by a constant shortage of medical supplies. Coupled with the high volume of wounded (more than 5,000 patients were treated in the orthopedic and general hospitals), these shortages often reduced the work of the staff to patient stabilization. Although ample quantities of blood and plasma were provided by both the civilian and military populations during the invasion, there were consistent short ages of basic materials such as sutures, paper operating drapes, anesthesia, bandaging, oxygen, and, oftentimes, food. These conditions rendered routine civilian care impossible. Routine joint replacements, for example, were completely curtailed, adding to the increased pain and suffering of the population. The cost of endoprotheses and their unavailability turned routine surgery into a scavenger hunt for "complete sets" of instruments and inventory.

Current Challenges

Oversaturation of hospital facilities continues to be a problem. Seventy patients are housed in a 45-bed orthopedic facility. There are five principal contributing reasons to the overcrowding, all consequences of the war:

1. War-related injuries still constitute 50% of all cases. Of these, revision and reconstructive surgery are the primary procedures.

2. The war in Bosnia spawns more refugees every day. Since 1991 the population of Osijek has increased by 50%. There is no foreseeable end to the influx of displaced persons -- already

numbering 40,000 -- who have streamed into Osijek and its bordering hamlets.

3. The military wounded since the beginning of the war have been treated alongside the civilian population in the same facilities.

4. The orthopedic hospital functions at only 75% of its pre-war capacity as a result of unrepaired damage.

5. Because there is only one operating room for orthopedic surgery and a continuing lack of anesthetics and supplies, many elective patients are forced to wait for long periods in valuable beds. Rehabilitation facilities throughout the region are seriously lacking, which results in above-normal recovery stays for post-operative patients. Two thousand people are awaiting rehabilitation and prostheses, according to Dr. Janosi. A rehabilitation center planned near Osijek is the optimistic vision of Dr. Janosi and other surgeons and physicians of the Osijek hospital, but the government of Croatia does not have the resources for the estimated \$6 million project.

Broader Consequences of the War

In addition to the challenges facing surgeons and hospital administrators, public health officials fear the broad social consequences of the war. There is little opportunity for early detection of disease and ill health among the existing population. Dr. Tibor Santo, Osijek's Director of Health, claims that juvenile delinquency has increased by more than 400%. Severe depression, especially among refugees, is the number one problem. "Twenty psychiatrists and psychologists serve a population of one million in the region. There are three teams of child psychologists for all the children in the region, including refugees," Dr. Santo asserts.

The solutions are still a long way off. Currently the war rages in Bosnia, draining funds, material, and manpower away from Croatia. According to the Regional Governor's office, the region sustained \$2.2 billion in war damages. Unemployment is approaching 50%. Government appropriations for the majority of health requirements

are hampered by the fact that they often must be made with the approval of the National Defense Ministry. "And there are always many conditions, if and when they are approved," adds Dr. Janosi. The economic strains of war have caused a breakdown in the government run health care system. Before the war all physicians received their salaries from the government; there was no private practice. Now those salaries have been decimated with the advent of double-digit inflation. A trend toward moonlighting and increased privatization of health care is a direct result of the inefficiencies that are being experienced throughout the struggling system.

People all over the region have their own memories of the bombing. As outsiders, we were overwhelmed with countless personal stories. War seems to postpone self examination and the ability to reflect; the 10 months of unremitting bombing flung people into purely reactive modes of behavior. It is only now, after the bombing, that people wrestle to come to terms with it. And many people discover that the path to reconciliation is as brutal as the very streets they avoided during the bombardment. Adding to the difficulty is the constant artillery threat that lurks from three sides of the city.

A 25-year-old government translator displayed a particular courage to share her feelings. "I know you might think this odd," she said, "but I would prefer the continuous nightly bombings to the situation we are in now." Her facial muscles tightened and she continued in a dour voice, "The uncertainty of the resumption of the bombing is more stressful than the knowledge that the bombs will fall every night."

The front line, however, is relatively quiet. What we see in the stygian zone known as "no-man's-land" are landmines scattered in the unharvested sunflower fields, charred vehicle skeletons rusting away along the sides of the untravelled roads, and war-hardened Croatian soldiers blankly staring out in the direction of Serbian artillery positions. Opposing mortar and artillery stare back. For now, the Serbs only lob an occasional mortar-shell warning, but each serves to arouse the agonizing memories of war.

☪

