EDITORIAL

Global voices: Providing medical care in a war-torn country

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Global Voices (Sacramento, California): Cardiac electrophysiologists are immensely specialized, highly focused, and committed to an intuitive and imaginative realm only they understand and can navigate. However, there comes a time when we need to transcend our boundaries to become global citizens and share our knowledge, compassion, and expertise, whether it be during the aftermath of an earthquake in Haiti, a tsunami in Indonesia, a nuclear accident in Japan, Hurricane Katrina’s cyclonic devastation of New Orleans, or the COVID-19 pandemic worldwide. In this issue of Heart Rhythm O2, we bring you the voices of electrophysiologists delivering health care in war-torn Ukraine.

Thomas Crawford, MD, FHRS (Ann Arbor, Michigan): I have known Dr Serhii Prorok since 2019, when he reached out to Project My Heart Your Heart seeking support for his pacemaker implantation center in Kyiv. Access to pacemaker therapy in Ukraine was very poor due to the economic challenges the country was facing even before the current Russian invasion. Then, the need for assistance was urgent; now it is dire.

Serhii Prorok, MD (Kyiv, Ukraine): I am an electrophysiologist who lives and works in Kyiv. We face tremendous problems and challenges in providing specialized and much-needed electrophysiological treatments during the war, whether they be catheter interventions, device implants, or conservative therapies.

Fortunately, few patients require urgent cardiac interventions; however, when interventions are necessary, we often are not able to perform them because of (1) the patient’s inability to reach us due to roadblocks; and (2) the lack of consumables as a result of necessary abandonment by company representatives and their distributors who left our cities because of active fighting.

The most critical situation is the lack of pacemakers. A large supply, purchased by the state, arrived at Boryspil Airport during a missile strike. Panic among the population did not allow quick distribution to the clinics. We managed to transport the pacemakers but for only 2 weeks, then chaos caused by the war led to complete blockade of access to these devices. As a result, patients with critical bradycardia are suffering. A small supply of off-label pacemakers quickly ran out. We are desperate for any functional pacemakers, even if previously used.

The panic caused by war led patients to buy large quantities of anticoagulants and antiarrhythmic drugs for fear that they will not be able to buy them later. This, combined with the challenges of receiving delivery of new supplies of drugs, has led to an astounding deficit of life-saving drugs. Our volunteers are helping locally, but we expect that drug shortages will increase in regions where fighting continues. In some locales, there are additional problems such as physical destruction of clinics and blockade of transport of humanitarian goods. Currently, in the western regions, health care professionals are able to work full-time. Thank you for your concern. We appreciate any help.

Michael Orlov, MD, PhD (Boston, Massachusetts): As the war against Ukraine unfolded, a friend, originally from Ukraine, connected me with Dr Tatiana Shandra and Dr Iurii Karpenko. Dr Shandra is Head of Electrophysiology at the Regional Cardiology Center in Cherkasy. She introduced me to Dr Karpenko from Odessa, who is the most senior academic electrophysiologist in Ukraine. Here, these physicians describe the difficulties they are

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encountering in delivering needed electrophysiological care on the front lines.

Tatiana Shandra, MD (Cherkasy, Ukraine): Ukraine is currently in a terrible war. War is not only on the battlefield, but also in our homes and in the streets among the civilian population. Cruise missiles fly and bomb not only areas where hostilities take place, but also in peaceful cities of Ukraine. Our sky is not closed. As medical professionals, we spend part of our lives in air-raid shelters, but we continue to work, day and night. We are committed to treating our patients as best we can; it is enough that many civilians die in bombed-out cities, and our soldiers die on the battlefield.

Our Cherkasy Regional Cardiology Center continues to provide emergency medical care to patients with ST-elevation myocardial infarction (STEMI) and non-STEMI by percutaneous coronary interventions as needed. However, there are difficulties with the logistics of delivering therapy as quickly as possible to our cardiology center (150 km away) through military checkpoints. In the first days of the war, some hospitals had to shut down angiographic equipment because of the proximity of explosions. We have reduced the number of planned hospitalizations to save beds for the massive influx of those individuals with terrible gunshot wounds.

We continue to provide emergency care for patients with acute and chronic heart block because these patients are vulnerable and cannot wait. We have a big problem getting needed pacemaker systems; they are almost gone. We need help. We continue to perform coronary artery bypass graft (CABG) surgery and valve procedures in high-risk patients. We will continue to fight the battles we face in health care because we have committed our lives to doing just that. Furthermore, we are confident that we will win the bigger war because we believe that truth is on our side, and we are defending our land and our freedom. Light overcomes darkness.

Iurii Karpenko, MD, PhD (Odessa, Ukraine): On February 24, 2022, everything changed in the lives of 40 million Ukrainians. A full-scale invasion of Russian troops has led to a hellish and unjust war. The Ukrainian army and the entire Ukrainian nation have been putting up heroic resistance since the invasion. This full-scale war is accompanied by a humanitarian crisis and difficulties in delivering needed medical care.

I am a Professor of Medicine, a cardiologist, an electrophysiologist with a long practical experience in the treatment of arrhythmias (35 years), Head of the Regional Center for Cardiac Surgery of Odessa Regional Hospital, and Head of the Department of Internal Medicine of the Odessa National Medical University. 2021 was our most successful year: we performed 1000 pacemaker and defibrillator implants and more than 500 catheter ablations using electroanatomic navigation systems.

The future seemed cloudless and transparent, like the sky in my beloved city of Odessa, where I was born, grew up, and developed our arrhythmia center. Today, Odessa is reminiscent of the summer of 1941, during which Ukraine mounted a heroic defense against Nazi Germany. Now, air-raid sirens sound several times a day. Odessa looks like a fortress. We continue to perform all urgent and most elective procedures. Experienced doctors remain in Ukraine and continue to work in Kyiv and several other cities. Many refugees came to western Ukraine. Arrhythmia Units there are actively assisted by their closest neighbors—Poland, Slovakia, Czech Republic, and Lithuania. Unfortunately, in cities under active shelling (Kharkiv, Sumy, Chernihiv, Mariupol) or captured by the Russian invaders (Kherson, Berdyansk, Melitopol), the medical situation is catastrophic.

A young patient with prolonged QT syndrome and recurrent ventricular tachycardia accompanied by syncope miraculously escaped Chernihiv, a city that is surrounded and shelled, and came to us for ICD implantation. The patient is doing well now! A military patient with bouts of highly symptomatic supraventricular tachycardia said to me: “Doctor, tachycardia prevents me from fighting, cure me!” The next day after the ablation, the patient left for the front.

Currently, we have enough supplies to treat our patients; however, as the fighting continues, we are likely to run out. We need the help to provide qualified care.

Brian Olshansky, MD, FHRS, CCDS (Iowa City, Iowa): The voices from Ukraine provide a stark reminder of how important it is to look beyond our own daily issues and understand the challenges and hardships that our colleagues are now facing. We can help. It is not just supplies, however, and it is not just Ukraine. It is collegial support on a global level. As electrophysiologists, international collaboration has strengthened our profession and allowed us to have stunning growth in our ability to deliver lifesaving care. We owe it to our colleagues now in Ukraine, and undoubtedly at other times and in other places, to help in their time of need.

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