

Migraine International: Croatia



the Plitvice Lakes, the Palace of Diocletian, and the justly famous walled city of Dubrovnik.

Migraine in King's Landing?

Along with a basketful of Emmy awards, *Game of Thrones* captured the imagination of many millions of viewers. Those familiar with the series already know that many of the scenes involving King's Landing, the capital of Westeros and the Seven Kingdoms, were filmed in Dubrovnik, the centuries-old walled city by the Adriatic Sea.

So popular was *Game of Thrones*

that tourists flock to visit sites associated with the series, including various locations in Northern Ireland and, inevitably, Dubrovnik. Given the city's well-established pre-*Game of Thrones* popularity, this additional influx can make for crowded conditions. Still, even then, its beauty is indisputable.

As it turned out, Dubrovnik proved to be an excellent first choice for this magazine's survey of migraine and migraine management in countries other than the United States. As I walked the narrow streets and alleys of the city on one beautiful July evening, my eyes

The Republic of Croatia is a country of 4 million people that is roughly half the size of Florida. It is bordered to the north by Slovenia and Hungary, Serbia to the east and Bosnia and Herzegovina and Montenegro to the south and beautiful azure waters of the Adriatic Sea to the west. One consequence of the bitter Balkans War of the 1980s, Croatia has been an independent nation since 1991.

Croatia's many natural attractions include the forests, lakes and karst caves of the Dinaric Alps and its long Adriatic coastline, a sailor's dream punctuated by over a thousand islands large and small, less than 50 of which are permanently inhabited. This biodiverse land contains ten locales included on the list of World Heritage Site lists, including



Croatia's Adriatic Coast



were drawn to a collection of vivid oil paintings hanging in a window. Entering the gallery, I fell into conversation with the owner and man responsible for those paintings, Captain Stjepko Mamic, a native Croatian and award-winning artist with an international reputation. While he has chosen many subjects for his work, he freely admits to a longstanding and particular devotion to Dubrovnik, the adjacent sea, and, most specifically, the nets used by the local fisherman as they ply that sea for their catch.

Even more fortuitous, Captain Mamic is married to a Croatian neurologist, Dr. Drazana Mamic, who was kind enough to provide firsthand insight into the management of migraine in her country.

Epidemiology means literally

“what is upon the people”, and at first glance the epidemiology of migraine in Croatia and the United States seems quite similar. The prevalences of migraine generally are about the same in the two countries,



with approximately 10-12% of the general population reporting an active history of migraine. In one relatively recent study investigators found the prevalence of chronic migraine in Croatia to be as high as 2.5%, and this, too, parallels the prevalence of this particularly malignant form of migraine in the US.

Taking a closer look, however, one can find some significant differences in migraine when the two countries are compared, and those differences in part reflect the different healthcare systems existing within each. At present, the US healthcare system is a somewhat bewildering amalgamation of modified fee for service, government-sponsored, commercial, and so-called “health maintenance organizations” (HMOs) which range from tightly-knit integrated healthcare networks such as Kaiser to more loosely integrated systems utilizing so-called “preferred provider organizations” (PPOs). And of course there are the 44 million Americans who currently have no healthcare insurance coverage and are generally “out of pocket” or out of luck should health problems arise.

In Croatia every citizen is covered by the Croatian Health Insurance Fund (HZZO) that is administered by the government and funded by mandatory payroll contributions. As with many countries utilizing a national health service system, there is a “second” or parallel path which enables those who have the means to pay private sector providers directly or to obtain through HZZO a voluntary insurance policy that supplements the mandatory coverage each citizen receives and enables them to see

providers who practice within the national system as well as in a private practice environment.

According to Dr. Mamic, migraine is one of the most common disorders managed by Croatian neurologists, and patients typically are referred by a primary care physician. To receive certain migraine medications (egs, triptans, topiramate, anti-CGRP monoclonal antibodies), HZZO requires that the patient first be seen by a neurologist. While in some cases the specific medications utilized may differ, the approach to treatment is much the same as it is in the US. Dr. Mamic does indicate that she frequently uses both nonsteroidal anti-inflammatory medications and combinations of “alternative” therapies such as vitamin E, magnesium and “crystallites” in her practice. She adds that she has not found onabotulinumtoxin to be especially helpful for her patients.

As for diagnosis, in the US brain imaging studies (CT, MRI) often are obtained as part of the evaluation, but in many cases the

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diagnosis of migraine is made on the basis of the patient’s history and physical examination alone. According to Dr. Mamic, in Croatia “it is obligatory to do CT and MRI” to establish a diagnosis of migraine.

The issue of “unmet needs” often arises in any discussion of patients’ satisfaction with the nature and effectiveness of their current migraine treatment regimen. In the US, 61% of patients in one recent survey expressed dissatisfaction with their current acute migraine treatment regimen. In a similar survey published in the peer-reviewed medical literature, about one-third of Croatian migraineurs were dissatisfied with their current treatment.

Despite its inefficiency, inequity and problems with access in particular, medical care in the US is typically outstanding. Even so, don’t assume that foreign medical care is inevitably inferior to ours. Croatia has well-trained and experienced providers who are quite capable of managing migraine effectively. As a migraineur, before you

travel to a country such as Croatia familiarize yourself with the basics of that country’s healthcare delivery system and use that knowledge to navigate the system more effectively if the need arises. As with all travel abroad, to minimize your migraine bring adequate amounts of the medications you have been prescribed, and to facilitate the process of being evaluated and treated effectively, bring with you a brief summary of your medical and migraine histories and list of your current medications. If it all possible, translate those materials into the language of the country you are visiting. Having that information in hand will be a tremendous help to the urgent care provider, ER provider or neurologist who evaluates you.

Selections from the prolific Captain Mamic accompany this article and appear throughout the issue. To view more of his art and learn more of the artist himself, go to www.stjepkomamic.com.