Clinical Pearls for Toxic Patients in the ED

BY LEON GUSOW, MD

There’s nothing like a clinical pearl to make it easier to recall what to do when that patient with an unusual poisoning shows up in your ED. That’s the case with some of the talks I heard at the American College of Emergency Physicians Scientific Assembly last year, including these about methadone, herbal preparations, energy drinks, and quicksilver.

Steven Bird, MD, from the University of Massachusetts, saw a 53-year-old man in a methadone maintenance program who presented with abdominal pain, nausea, and vomiting. His electrocardiogram showed a normal QRS interval (88 msec) and a prolonged QT interval (608 msec). The patient developed polymorphic ventricular tachycardia (torsades de pointes) after receiving ondansetron for the gastrointestinal symptoms.

Methadone can increase the QT interval and cause torsades, but Dr. Bird pointed out that even physicians who work in opioid treatment programs are generally not aware of this effect. (J Addict Dis 2014;10[3]:299.) A 27-year-old man in a methadone, herbal preparations, energy drinks, and quicksilver. Another pearl came from Trevonne Thompson, MD, of the University of Illinois Medical Center: Energy drinks contain more caffeine than you might think. He pointed out that most energy drinks claim a caffeine content of between 80 and 500 mg, but also often contain guarana. This South American plant contains guaranine, which is, in fact, caffeine. Frequently, guarana is not included in the caffeine dose listed on the drink’s label, but a gram of guarana adds 40-80 mg of caffeine. Guaranas also contain other stimulants such as theobromine and theophylline.

The last pearl can be summed up with one word: Quicksilver. Mark Myczyk, MD, also of Stroger Hospital, said this designer stimulant is brand new. London toxicologists reported a case of toxicity from the methamphetamine analogue methiopropamine. (J Med Toxicol 2014;10[3]:299.) A 27-year-old woman presented with nausea, vomiting, palpitations, chest tightness, anxiety, and visual hallucinations. Street names include legal methamphetamine and Quicksilver. Unfortunately, almost no scientific data illuminate the pharmacology or toxicology of this drug.

In Brief

Fast Track for Ebola Drug Has Faltered

Very little of the Ebola experimental drug said to be responsible for two Americans’ recoveries has been produced, contrary to a vow federal officials made six months ago, according to the New York Times.

This diminishes the chances that the drug, ZMapp, can be used to treat large numbers of patients in the current outbreak, which appears to be subsiding. Regardless, delays show some gaps in preparedness and have frustrated biodefense and infectious disease experts.

Last week, government officials announced that a clinical trial to test whether ZMapp is effective would begin in Liberia, probably within three weeks. The trial at most, however, would involve 150 patients. The Department of Health and Human Services asked for proposals to produce more to be submitted by November, but so far, no contracts have been allocated. Read more: http://nyti.ms/lwsviw.

and does not require that they be proved effective or safe before they are unleashed onto the marketplace. Supplements must contain a vitamin, mineral, amino acid, herb, or other botanical. There is nothing in the law stating what supplements cannot contain, however. The Food and Drug Administration has the authority to take a dietary supplement off the market only if it can demonstrate that the product presents a significant and unreasonable risk.

Another pearl came from Trevonne Thompson, MD, of the University of Illinois Medical Center: Energy drinks contain more caffeine than you might think. He pointed out that most energy drinks claim a caffeine content of between 80 and 500 mg, but also often contain guarana. This South American plant contains guaranine, which is, in fact, caffeine. Frequently, guarana is not included in the caffeine dose listed on the drink’s label, but a gram of guarana adds 40-80 mg of caffeine. Guaranas also contain other stimulants such as theobromine and theophylline.

The last pearl can be summed up with one word: Quicksilver. Mark Myczyk, MD, also of Stroger Hospital, said this designer stimulant is brand new. London toxicologists reported a case of toxicity from the methamphetamine analogue methiopropamine. (J Med Toxicol 2014;10[3]:299.) A 27-year-old woman presented with nausea, vomiting, palpitations, chest tightness, anxiety, and visual hallucinations. Street names include legal methamphetamine and Quicksilver. Unfortunately, almost no scientific data illuminate the pharmacology or toxicology of this drug.

Access the links in EMN by reading this on our website or in our free iPad app, both available at www.EMN-News.com. Comments?
Write to us at emn@lww.com.

Dr. Gussow is a voluntary attending physician at the John H. Stroger Hospital of Cook County in Chicago, an assistant professor of emergency medicine at Rush Medical College, a consultant to the Illinois Poison Center, and a lecturer in emergency medicine at the University of Illinois Medical Center in Chicago. Read his blog at www.thepoisonreview.com, follow him @poisonreview, and read his past columns at http://bit.ly/GussowToxRounds.

Dr. Gussow is a voluntary attending physician at the John H. Stroger Hospital of Cook County in Chicago, an assistant professor of emergency medicine at Rush Medical College, a consultant to the Illinois Poison Center, and a lecturer in emergency medicine at the University of Illinois Medical Center in Chicago. Read his blog at www.thepoisonreview.com, follow him @poisonreview, and read his past columns at http://bit.ly/GussowToxRounds.