The American College of Medical Toxicology Highlights Antidotes in the Journal of Medical Toxicology

The September issue of the Journal of Medical Toxicology features several articles examining the use of new antidotes and new indications for some classic agents. Included in this issue are studies of intravenous lipid as an antidotal therapy, a review of potential new uses for methylene blue, and an article reviewing the use of sodium acetate as a substitute for the commonly used antidote sodium bicarbonate during times of drug shortage.

Phoenix, Arizona (PRWEB) August 27, 2013 -- Intravenous lipid emulsion, a cutting-edge novel antidote also known as “therapeutic fat,” is featured in three different studies in the September issue of the Journal of Medical Toxicology (JMT), the official journal of the American College of Medical Toxicology (ACMT). Stephanie Carreiro and colleagues from Brown University add to the growing body of scientific literature regarding the effect of lipid on blood pressure in their study “Intravenous Lipid Emulsion Alters the Hemodynamic Response to Epinephrine in a Rat Model.” According to Michael Christian and his co-authors of “Lipid Rescue 911,” data from laboratory studies such as Carreiro’s and the apparent success of lipid therapy in several cases of human poisoning are reasons why most U.S. poison centers now routinely recommend this antidote for poisoned patients who are critically ill. However, in a related study from San Diego, Michael Darracq and colleagues found that poison center recommendations for use of therapeutic lipids and other cutting-edge antidotes are not consistently followed. The authors suggest that better education is needed for bedside clinicians regarding the use of these potentially life-saving interventions.

In addition to providing information regarding new antidotes, the September issue of JMT reports on emerging trends and challenges with the use of older antidotes. Methylene blue, an antidote traditionally used to treat patients who appear “blue” as a result of the blood disorder methemoglobinemia, may hold promise as a treatment for patients who are in shock and do not respond to other therapies. David Jang and colleagues review potential emerging indications for use of methylene blue. Another review addresses the recent U.S. pharmaceutical shortage of sodium bicarbonate, an antidote commonly used in the treatment of poisoning by antidepressant and over-the-counter pain medications. Mark Neavyn and co-authors examine the usefulness of sodium acetate as a replacement for sodium bicarbonate in times of shortage, and advise readers of appropriate use of this agent as an antidote.

ACMT is a professional, nonprofit association of physicians with recognized expertise in medical toxicology. The College is dedicated to advancing the science and practice of medical toxicology through a variety of activities.