

Foreword

Clinical Toxicology



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Humans love drugs. Since the beginning of recorded history of medicine, laypersons and physicians alike have sought substances to cure maladies and to ease pain. Early natural substances eventually gave way to synthetic and chemical compounds as technology advanced, and with this advancement came increased potency of those substances. Increased potency of drugs resulted in increased side effects. In addition, with medical advances in our ability to ease pain came greater opportunity to abuse substances. Drugs originally intended to ease suffering were increasingly used to heighten pleasure and produce altered states of consciousness. In the modern day, our society's ability to create drugs has essentially produced a three-edged sword: on the one hand, drugs can cure disease and improve life; they can also produce dangerous side effects, and they can be intentionally abused and result in serious adverse social and medical consequences.

Compounding these issues are other changes in our society that have contributed to the number of cases of "adverse drug scenarios." The combination of a rapidly growing geriatric population along with medication over-prescribing has resulted in complications related to polypharmacy never before seen in human history. Advanced chemotherapy drugs, immunosuppressants, and anticoagulants have myriad side effects and deadly drug interactions. With regard to the substances of abuse, illicit drug use continues to be on the rise, fueled by an entertainment industry (music, movies and television, sports figures) that both implicitly and explicitly endorses "recreational" drug use. Clinical toxicologists and on-site clinical pharmacists have never before been in such high demand. For those emergency care providers that do not have immediate access to toxicology experts, it is imperative to know as much as possible about toxin-induced diseases.

In this issue of *Emergency Medicine Clinics of North America*, guest editors Drs Lugassy and Smith have assembled an outstanding group of authors to educate us on this increasing challenge in our specialty. An early, fairly comprehensive article is provided to update us on the newest, most "innovative" drugs of abuse. The authors

then turn their attention to the tremendous problem of toxin-induced disease and drug side effects. They address the hot topic of drug-induced coagulopathy, clearly an almost daily problem we face in emergency departments today. They also address drug-induced maladies of various organ systems: the heart, the liver, the lungs, and the central nervous system. Separate articles are provided to address chemotherapeutic agents, acid-base abnormalities, radiation exposure, and marine envenomations. Finally, an article is provided to address some special concerns in pediatric patients.

This issue of *Emergency Medicine Clinics of North America* represents an important addition to the emergency medicine literature. The guest editors and authors are to be commended for providing a single resource that covers a broad spectrum of toxicologic emergencies in a succinct, clinically relevant, and cutting-edge manner.

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