Preface

Common Toxicologic Issues in Small Animals

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Guest Editors

Acknowledgment and dedication from Dr Safdar Khan:

“Dedicated to my father who, through education and participation in sports, strived to enrich the lives of his children and grandchildren.”

Compiling information for this issue, editing, and working with peers and friends, has been a great honor and humbling experience. Thanks to my most wonderful colleagues and friends at the ASPCA and administration who contributed directly or indirectly for providing me time and facilities and for their untiring support and encouragement in completing this task. And most importantly, thanks to my family for their patience, support, and understanding, without which this project could not be completed.

Acknowledgment from Dr Stephen Hooser:

“As always, I would like to acknowledge the unwavering support of my wife, daughter, and son, without whom I would never have done this much or gone this far.”

Animals, small and large, are continually exposed to chemicals in their environment. Each individual animal is exposed to chemicals from the earliest point in its existence, ie, the moment when the egg that will someday develop into that individual is formed in the ovary of its mother while she is still in the uterus of its grandmother. Therefore, it is important that we periodically review trends in toxicology to see what is out there and keep the veterinary community informed. This current volume of Veterinary Clinics of North America: Small Animal Practice continues this vital task.
Although our grandmothers were exposed to heavy metals and organochlorine insecticides such as DDT, these have largely been eliminated or replaced by newer and safer compounds over the years. Although still important, heavy metals such as lead have been replaced with other compounds or eliminated from use when possible. Organophosphate insecticides are being phased out in favor of pyrethroids and other pesticides that have lower mammalian toxicity. The chemicals have changed, and in relation, the acute poisonings affecting small animals have changed as well.

As veterinary toxicologists have observed over the years, and as are described in the articles of this current volume, trends in small animal toxicoses have changed. They reflect the changes not only in the chemicals being used but also in the relationship of domestic animals with their owners. While exposure and possible toxicoses related to insecticides, rodenticides, household chemicals, and plants still occur, there are now many more reports of exposures and toxicoses related to ingestion of human medications. Pets play important roles in our lives; they bring pleasure, calmness, and joy to us and to our children. They are often now considered important members of our families. This integration into our homes has increased opportunities for pets to get exposed accidently to many agents easily available in their environment. Instead of being exposed to highly toxic pesticides, pets are now more likely to be exposed to human medications and suffer serious consequences. Many types of medications such as attention deficit and hyperactivity disorder, non-steroidal anti-inflammatory drugs, and heart medications are commonly available in many households. As needed, analytical techniques for diagnosis of newly introduced compounds are developed. Reports of adverse pet food-related events have led to increased surveillance activities to identify possible contaminants. The assistance of highly trained canines to detect explosives has led to increased ingestion of explosives by dogs. New therapies, including intralipid therapy for the treatment of toxicoses due to exposure to fat-soluble chemicals, are being used. Discussions of these types of intoxications, plus articles on differential diagnoses and antidotal therapy, are presented here. To strengthen evidence, characterize sensitivities and trends, and identify clinical syndromes, information retrieved from the ASPCA Animal Poison Control Center toxicology database has been included whenever needed. As the world changes, veterinary toxicologists will continue to help monitor, follow, and understand those changes so that evolving toxicological problems can be controlled, treated, or eliminated.

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