DRUGS AND THE PERFORMANCE HORSE

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PREFACE

As I write these words, the field of performance horse medication in the United States is in turmoil. By the end of the 1970s, the days when horses ran on "hay, oats, and water" and little else were all but gone in the United States of America. Essentially alone among the major racing states, New York ran medication-free horses.* Most of the other major racing states, starting with Colorado and spreading from there, allowed some form of permitted or controlled medication in their horses. While as recently as 1968 the calling of a "positive" for the then-prohibited phenylbutazone on DANCER'S IMAGE in the Kentucky Derby triggered a court battle that lasted for years, by 1978 horses could legally run on phenylbutazone in many of the major racing states. More recently, however, federal legislation has been proposed to ban the use of medication in racing horses, and in the light of this proposal many racing jurisdictions are reassessing their medication policies.

Such quantum changes in usage patterns and people's attitudes to the use of drugs in horses has led to an increased demand for information about the effects of drugs in horses. This, in turn, has led to the setting up of research programs, such as the Kentucky Equine Drug Research Program, of which I am director. The mission of this program is to measure, analyze, and report on the detection and actions of drugs in horses. While results from this and other programs are published in scientific journals, these journals are usually not readily available to horsemen or interested members of the public, and neither is the raw data and partly digested information found in such journals particularly useful to horsemen. A further problem is that the average horseman has nowhere to go to get the background information required to understand such articles and put them in perspective. The primary objective of this book, therefore, is to bring together in one volume the necessary background material and published information to present horsemen with an understandable and informative account of the field of performance horse medication. This book is not an academic exercise, of which I have had plenty, but an effort to describe the current state of our knowledge about drugs in performance horses.

This book is likely to be useful to more than the average horseman. The science of pharmacology is of very recent origin, many of the drugs we use and most of the background information required to understand their use having been developed within the last twenty years. Since most people involved in the management of racing, including commission veterinarians, tend to have had little formal education within this period, this book should be particularly useful to them. The probability is that most commission veterinarians will, like myself, have had courses rather quaintly called "Materia Medica" which discussed the medications and carried the intellectual stamp on an earlier, less complex era.

^{*} Medication "free" in that no drugs are permitted to be administered within 48 hours of post time.

Another important goal of this book is to strip away as much as possible of the myth, rumor, and ignorance that surrounds the use of drugs in horses. On the principle that the less people know, the more they suspect, I have chosen to name drugs and to discuss their actions, doses, time to peak effect, and clearance times in a way that some might interpret as aiding individuals who wish to misuse drugs. I do not think this is likely to be the case. As one reads this book it becomes apparent that most of the effective stimulant dopes have been with us for some time, in many cases up to 100 years and longer. Little that I can say about these drugs will help that most astute equine pharmacologist, the horseman knowledgeable in the use of drugs. The goal of this book is to put drugs in horses into accurate perspective. In the hands of the popular press, and more recently television, completely unsupported rumors have unquestionably done more damage to racing's image than all the drugs that have ever been given to horses. Journalism and media presentations that equate drugs like Lasix® (furosemide) and "bute" (phenylbutazone) with apomorphine and Sublimaze® and lump all drugs under the heading of "dope" will, it is hoped, be easier to refute if the actions, effects, and problems with drugs of all classes are clearly laid out. Secrecy and the uneasy feeling that racing has something to hide in its use of medication do more damage to racing's public image than anything else. Further, this book comes at a time when the racing industry, having developed analytical methods for reserpine and fentanyl, has made spectacular advances in its control of prohibited medication and has good reason to be proud of its record.

The medication of performance horses is a complex area, an interface between the fields of veterinary medicine, pharmacology, analytical chemistry, law, business, public relations, and horse breeding, to mention but a few. As an individual trained in the first three of these fields, I am competent to discuss the actions and detection of drugs in horses with some authority and to offer advice and opinions elsewhere. The reader should keep in mind that the further I stray from the first three of these fields, the less sure my grip on the subject is likely to be. As for my command of the first three fields, most of the material on which I base my comments is published and listed in the reference lists, so if the reader is so inclined he can check it out for himself.

In organizing this book, I have chosen to divide it into five sections. The first section deals principally with the background required to understand why people put drugs into horses, how drugs produce their effects in horses, and, in a broad sense, how horsemen control the use of drugs in horses. We then proceed to a discussion of the specific drugs, starting with the drugs of controlled medication (Section II), followed by the illegal drugs (Section III), and then the drugs that are not considered a regulatory problem (Section IV). Finally, then, in the last section (Section V) we deal with medication control from the point of view of the analyst, the regulator, and the lawyer.

Although equine medication is a complex area, the field does have its humorous aspects. In an attempt to capture this lighter side, my good friend Bob Herndon went through the text and sketched some of the incidents described. While many of these sketches carry very valid messages, their primary role is to lighten an often tedious field. None of them, therefore, is meant to be taken too seriously.

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rndon : many : often This book is, to my knowledge, the first attempt to draw together pertinent information from the various fields of equine medication and present an understandable synopsis. It is my hope that this volume will serve as an introduction to the area for the many people with an interest in drugs in horses but with little background in pharmacology. It should also serve as an up-to-date refresher for those whose formal training in this area may be dated. Finally, with a media battle looming over the possibility of federal legislation in this area, I hope that this book will serve as a stable point of reference in what can, unfortunately, be a highly emotional area. If I succeed in attaining any one of these goals, I will consider this book a success for the reader. As for myself, I have thoroughly enjoyed writing it.

THOMAS TOBIN

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