This is an exciting time to be involved in the study of osteoarthritis. New information is continuously becoming available regarding the biochemistry of articular cartilage and changes that occur within the osteoarthritic joint. As our understanding of osteoarthritis increases, therapeutic agents targeted toward specific aspects of treatment are being identified. The discovery of cyclooxygenase-1 and -2 has revived interest in identifying and designing nonsteroidal anti-inflammatory drugs that have reduced side effects. The roles of nutritional management, exercise, and physical therapy, long ignored in veterinary medicine, now are being recognized as important factors in treating osteoarthritis. The search continues for disease-modifying drugs that improve joint function or structure. It is apparent from our understanding of the pathophysiology of the osteoarthritic joint and response to various treatments that osteoarthritis is not a simple condition with a simple cure.

As veterinarians, our ability to diagnose osteoarthritis, by both physical examination and diagnostic imaging, is increasing. Owners also are developing a heightened concern for their dog’s or cat’s pain and discomfort and will seek relief of their pet’s distress through both medical and surgical management. Our challenge will be to identify, by scientific methods, treatments that provide this relief. The field of rheumatology has long been associated with anecdotal reports of treatments that provide cures. Although many of these treatments do not cause harm, neither do they provide benefit. By developing an appreciation for the process necessary to prove therapeutic efficacy, including an understanding of the value of objective gait assessment, the practitioner will be able to make informed decisions regarding the treatment of osteoarthritis.

I would like to express my sincere appreciation to the contributing authors for sharing their knowledge and expertise. I also would like to thank John Vassallo and the staff at W.B. Saunders Company for the opportunity to participate in this issue of Veterinary Clinics of North America: Small Animal Practice as Guest Editor. I hope that the efforts of all those involved have provided the practicing veterinarian with a concise compilation of the information necessary to advance the understanding of osteoarthritis and its treatment.

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