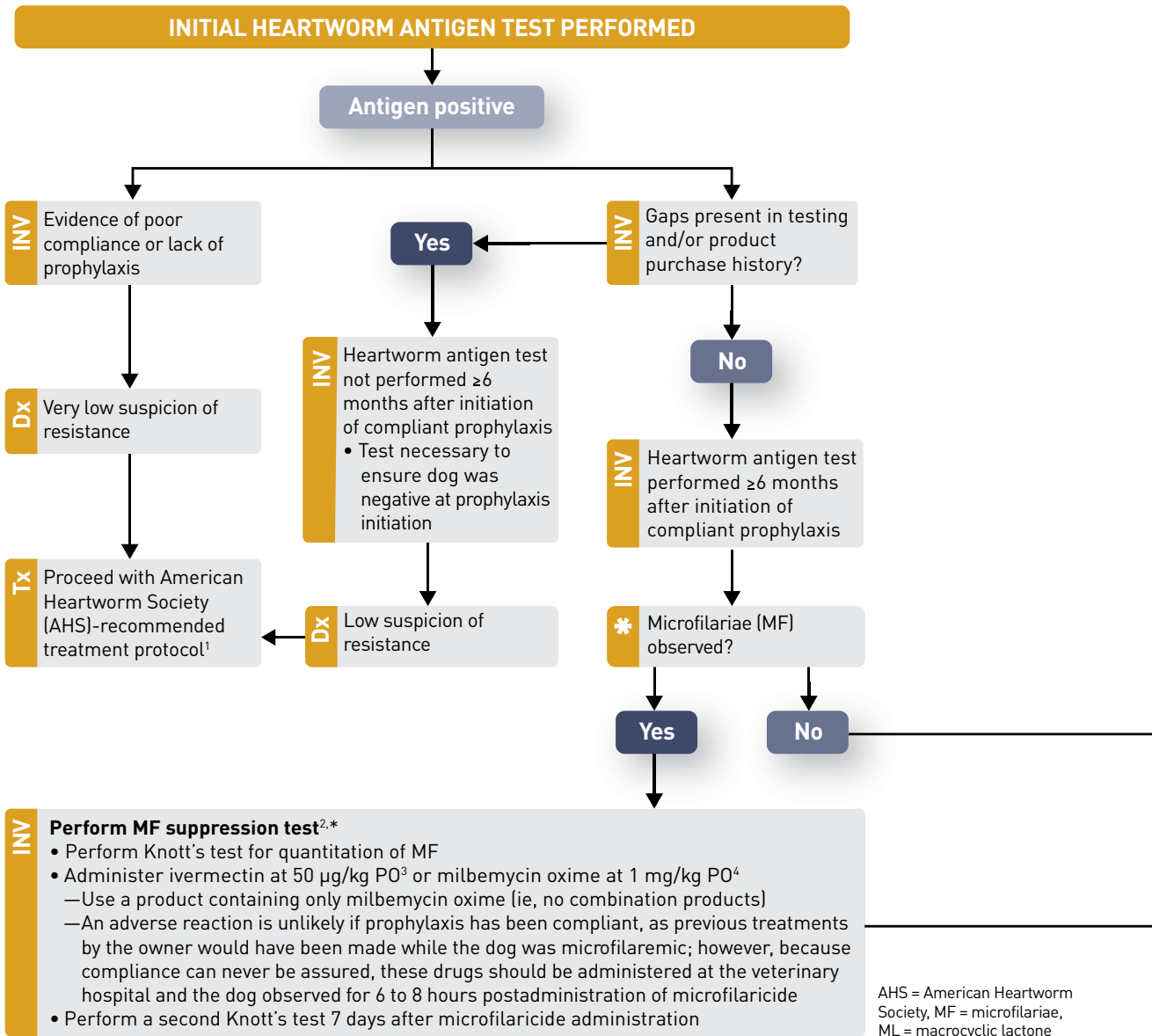




Macrocytic Lactone-Resistant Heartworm Disease

Andy Moorhead, DVM, MS, PhD
Ray M. Kaplan, DVM, PhD,
DEVPC, DACVM (Parasitology)
University of Georgia



Author Insight¹

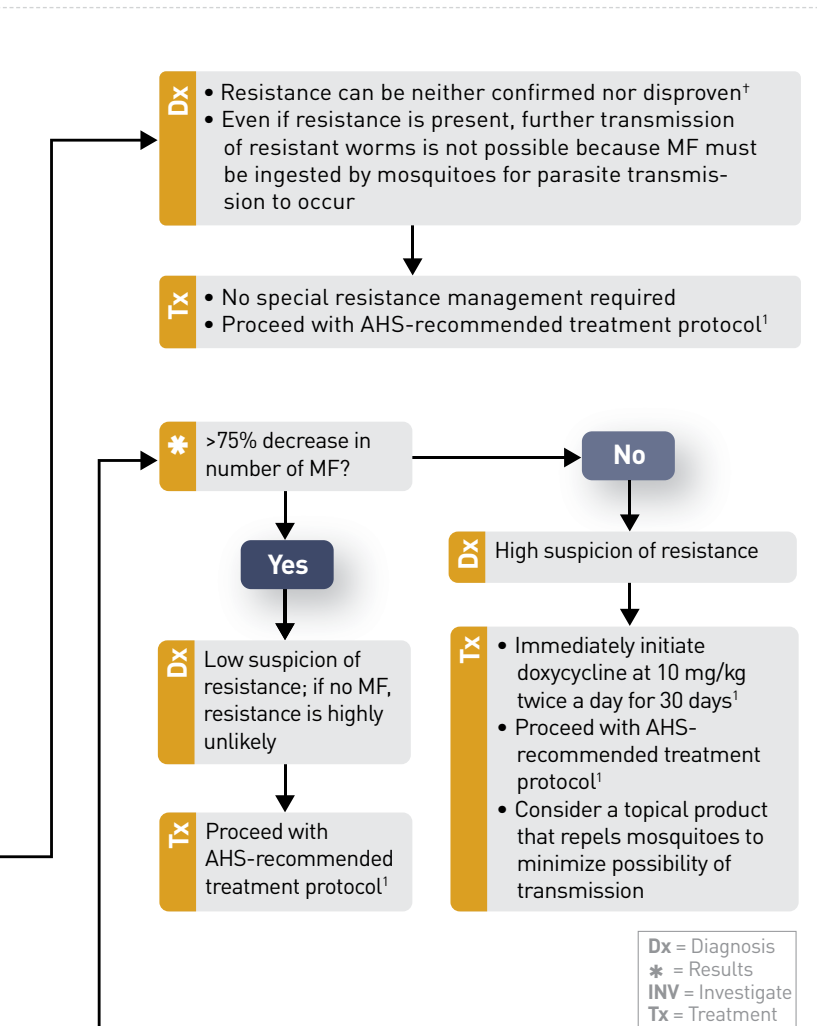
Resistance to macrocyclic lactone (ML) preventives in canine heartworm cases has been proven, though there are few documented cases. To the authors' best knowledge, clinical patterns to date suggest that most proven cases of ML resistance in heartworms have been diagnosed in dogs residing in or translocated from the Mississippi Delta region and that cases of resistance are rare outside this region. However, it is possible that resistance is more widespread than currently recognized. No tests for resistance are available to determine the prevalence and distribution of resistance in heartworms,⁵ making definitive diagnosis impossible.

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ANDY MOORHEAD, DVM, MS, PhD, is a small animal parasitologist at University of Georgia and director of the Filariasis Research Reagent Resource Center. Dr. Moorhead earned his DVM from North Carolina State University and his MS in veterinary parasitology from Purdue University, where he studied the raccoon roundworm *Baylisascaris procyonis*. He received his PhD in cellular microbiology from Cornell University. Dr. Moorhead's research interests include the role of host-specific cues in development of filarial worms, specifically *Dirofilaria immitis* and *Brugia malayi*.

RAY M. KAPLAN, DVM, PhD, DEVPC, DACVM (Parasitology), is a professor of parasitology and director of the Parasitology Diagnostic Laboratory at University of Georgia, as well as past president of the American Association of Veterinary Parasitologists (2015-2016). He earned his DVM from Virginia-Maryland College of Veterinary Medicine and his PhD in veterinary parasitology at University of Florida. Dr. Kaplan's research program is focused on measuring, understanding, and solving drug resistance in nematode parasites.



* Performance of the MF suppression test is recommended by the authors solely to identify resistant heartworm cases and is not a normal standard of care procedure for treating heartworm cases.

† To the authors' knowledge, all proven cases of resistance to date have been microfilaremic. Lack of MF suggests that the case does not involve resistance, the dog has no female worms, or infections are still immature and have not yet become patent.