The treatments prescribed by the referring veterinarian would be warranted only if this dog had congestive heart failure.

**DEAR EDITOR:**

We read with interest the article “Dental Prophylaxis in a Dog” by Lisa Sams Ebner, DVM, MS, DACVAA, CVA, in the March 2017 issue of *Clinician’s Brief* and appreciate Dr. Ebner highlighting the possibility of enalapril exacerbating anesthesia-induced hypotension. We were previously unaware of this complication. However, we disagree with the diagnosis of congestive heart failure (CHF) in the discussed patient and the subsequent treatment choices.

As Dr. Ebner suggests, some anesthetic complications may have been avoided by discontinuing the ACE inhibitor before administering anesthesia. However, a larger question was not addressed: Did this dog have CHF and require any cardiac medications to begin with? We believe the answer is an emphatic “no,” and that with only simple, easily obtained information from the history and physical examination, the referring clinician could have reached the same conclusion.

The patient was a geriatric small-breed dog with a soft left-sided systolic murmur, which is most commonly caused by myxomatous mitral valve disease (MMVD). However, beagles are also predisposed to pulmonic stenosis, and without additional evaluation, the underlying cardiac pathology can only be suspected.

The dog was treated with diuretics and ACE inhibitors. However, these drugs are reserved for treating dogs with CHF. Several studies have failed to demonstrate any delay in CHF onset caused by administration of ACE inhibitors to dogs with subclinical MMVD. Therefore, the treatments prescribed by the referring veterinarian would be warranted only if this dog had CHF.

Two clues support our contention that this dog did not have CHF and that the MMVD was mild. First, the soft murmur (2/6) suggests mild MMVD. In a recent study of almost 600 dogs, all dogs with soft murmurs never had CHF and always had mild MMVD. Based on this observation alone, neither diuretics nor ACE inhibitors would be indicated.

The second clue is the interpretation of the thoracic radiographs as unremarkable or normal. With the exception of dogs with acutely ruptured chordae tendinae, dogs with CHF secondary to MMVD have at least moderate—and usually severe—left atrial enlargement. Dogs with acute chordal rupture sufficient to cause CHF typically have loud murmurs. Therefore, this dog likely had neither acute chordal rupture nor marked cardiomegaly and, consequently, could not have had CHF.

If the dog had pulmonic stenosis rather...
than MMVD, the soft murmur would support the contention that the stenosis was mild. Mild pulmonic stenosis does not increase risk for anesthesia and would not result in pulmonary edema with fluid administration. Furthermore, neither diuretics nor ACE inhibitors are routinely indicated in dogs with pulmonic stenosis.

Because dental prophylaxis is an elective procedure, furosemide and enalapril could have been discontinued without concern several days before anesthesia.

We also believe an echocardiogram was unnecessary to make therapeutic decisions in this case. The author suggests that a preanesthetic echocardiogram could have prevented the complications experienced in managing this patient from occurring. However, we believe the decision to discontinue enalapril could easily be made based on a careful history, physical examination, and radiographic evaluation.

—Sincerely,
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References